



TRABAJO DE FIN DE GRADO

«Contrastive analysis of the prepositions *para/por* in Spanish, English and German and its learning through Digital Platforms»

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Abstract: Contrastive linguistic studies show that one of the grammatical areas that presents the highest level of difficulty in second language teaching and learning environments is the usage of prepositional phrases and, concretely, the usage of *para* and *por*. In fact, the distinction between these prepositions does not seem to be so obvious in an intralinguistic level. In this sense, this study intends to identify the potential areas of difficulty that may obstacle the teaching and learning processes of Spanish students, specifically the acquisition of these prepositions in both English and German through a contrastive analysis. In addition, the popular M-Learning application *Duolingo* will be proposed as a possible tool that does not only stimulate the development of the general and specific competences that the *Common European Framework of Reference for languages: learning, teaching, assessment* (2020) points out, but also encourage the learner's motivation towards the teaching and learning processes and the acquisition of digital competences.

Keywords: *Contrastive linguistic, para, por, contrastive analysis, Duolingo, Second Language Teaching and Learning*

Resumen: Estudios de Lingüística contrastiva muestran que una de las áreas gramaticales que presentan mayor índice de dificultad en la enseñanza y aprendizaje de segundas lenguas se corresponde al uso del sistema preposicional, concretamente el uso de *para* y *por*. De hecho, la distinción entre estas preposiciones, a veces, no parece ser tan evidente a nivel intralingüístico. En este sentido, este estudio pretende ilustrar, mediante la aplicación de un análisis contrastivo, las posibles áreas de dificultad que puedan obstaculizar el proceso de enseñanza y aprendizaje de estudiantes españoles sobre estas preposiciones en inglés y alemán. Además, se planteará un estudio de la popular aplicación *Duolingo* como una posible herramienta que estimule no solo el desarrollo de las competencias generales y específicas que señala el *Marco Común Europeo de Referencia para las Lenguas: aprendizaje, enseñanza, evaluación* (2020), sino la motivación hacia los procesos de enseñanza y aprendizaje y la adquisición de la competencia digital.

Palabras clave: *Lingüística contrastiva, para, por, análisis contrastivo, Duolingo, enseñanza y aprendizaje de segundas lenguas.*

1. Introduction

1.1. Justification

Second language teaching is, perhaps, one of the most damaged educational fields in Spain. Indeed, the constant modifications in the Spanish educational system as a result of political alternances have led to a system that does not stimulate the learning process but, rather, has obstructed it (R. Muñoz Zayas, 2013).

Furthermore, one of the most complex areas in second language teaching is the usage of the prepositional phrases, concretely, the differences between *para* and *por* (I. de la Cruz Cabanillas, 2008). Therefore, it is of utmost importance, for linguists and teachers of second language, to explore alternatives that are effective enough to address this kind of problems.

In this sense, several analyses have been carried out to compare the systems of each language in order to find out similarities and difficulties that may occur during the teaching and learning processes. Furthermore, various methodologies have been proposed as an attempt to achieve this goal. Some of them include the introduction of new technological advances that encourage practising prepositions in the second language through games. Both, the contrastive analysis of the prepositions *para/por* in Spanish, English and German and a didactic proposal that includes these gamified tools will be used here to ease the learning process of these prepositions in the second language and to encourage the students' motivation.

1.2. Objectives

Concerning the complexity of teaching and learning prepositions in a second language and the limitations of previous methodological systems, the purpose of this paper is to detect the main areas of difficulty that exist in the usage of *para/por* by Spanish students of English and German as a second language and, subsequently, to propose a didactic methodology that includes the gamified M-Learning application *Duolingo*, a beneficial tool that strengthens the acquisition of these prepositions in the second language. It is to be hoped that this paper may usher future investigations and practices that apply the didactic proposal in second language teaching environments.

In order to achieve the above general goal, the following objectives will be pursued: 1) To define the scope of contrastive linguistics and its application within the field of second language

teaching, and in so doing the focus of the analysis; 2) to explain the process through which technological resources were introduced in the field of second language teaching, focusing on the arrival of gamified M-Learning applications; 3) to identify, compile and contrast the uses of the prepositions *para*/*por* in Spanish, English and German as they are codified in dictionaries or grammatical works, paying special attention to the possible mismatches between the linguistic systems of these languages; 4) to analyse the functioning of the application *Duolingo* in terms of its gamified elements, the organization of the contents, the types of exercises it proposes and their contextualization and the functions or resources that it includes; and 5) to create a didactic proposal that draws on the results of the contrastive analysis and that makes use of *Duolingo* to improve the student's competences and to encourage their involvement in the learning process.

1.3. Methodology and Structure

Regarding the methodology, a quantitative-qualitative investigation has been conducted through a systematic research of the uses of these prepositions described in their entries in the dictionaries and grammatical works of each language. To this effect, the meanings of each preposition have been classified in an Excel template not only to elaborate tables and figures, but to facilitate the comparison of the linguistic systems of each language. On this basis, the qualitative research intends to illustrate the usage of *para* and *por* in Spanish, English, and German through a comparative method and, on the basis of a contrastive analysis, to identify the potential areas of difficulty that may affect the process of teaching and learning of these prepositions.

Concerning its structure, this paper will firstly provide the indispensable theoretical background on second language teaching, contrastive linguistics, and the use of technological resources in didactic methodologies so that the first two objectives can be accomplished. Once this theoretical basis is built, the quantitative and qualitative analyses of the uses of the prepositions *para* and *por* in Spanish, English and German will be conducted according to the latest version of contrastive analysis, which follows the subsequent procedure: description, juxtaposition and comparison. Besides, the application *Duolingo* will be analysed, with special attention paid to the possible benefits that it can offer. The results of these analyses will be essential for the elaboration of a final didactic proposal that intends to be both, informative and stimulating.

2. Second Language Teaching: Definition, Major Objectives and Terminological Distinctions

Second language teaching, according to Mackey & Gass (2012), is an interdisciplinary area that involves a variety of fields such as education, linguistics, sociology, and psychology, among others, that has constantly evolved due to the development of both, those disciplines that converge and the own field of study and intervention. This field is related to the learning process and it is centred on situations where individuals are exposed to language contact contexts and they should use the language they are learning instead of their native language (I. Santos Gargallo, 1993). In this sense, it is relevant to provide definitions of both first and second language.

First language, or mother language, is defined in the online version of Ernesto Martín Peris' *Diccionario de términos clave de ELE* (2008) as the first language that human beings acquire during childhood, which becomes an essential tool for thinking and communicative purposes. It is important to highlight that, despite the lack of consensus concerning what a first language is, specially in plurilingual communities, it is argued that individuals can have several first languages, although it is possible that one of them may become dominant in the future. (E. Martín Peris, 2008). On the other hand, the dichotomy between second language-foreign language is explained in the fifth edition of Isabel Santos Gargallo's work *Lingüística aplicada a la enseñanza-aprendizaje del español como lengua extranjera* (2017). According to this author, second languages fulfil a social and institutional function in the linguistic community they are learnt, while a foreign language lacks this social and institutional function in the context it is learnt (I. Santos Gargallo, 2017).

Moreover, Vivian Cook (2008) illustrates the evidence of the relation between teaching and learning by claiming that "the proof of the teaching is in the learning" (V. Cook, 2008: 8). Despite this relation, it is important to make a terminological distinction between these processes since, as I. Santos Gargallo (1993) explains, learning is a term which focuses on the cognitive processes involved during the learning process, regarding the students as the main participant implicated in it, while teaching is connected to methods, the elaboration and employment of activities and contents that point the teacher as the active agent that gears the learning within the educative context.

Another terminological distinction emerges between learning and acquisition. According to Stephen D. Krashen (1982), acquisition refers to a subconscious process in which individuals

develop their communicative competence, similarly to the way in which children acquire their first language. On the other hand, this author defines learning as the “conscious knowledge of a second language, [which involves] knowing the rules, being aware of them, and being able to talk about them” (S. D. Krashen, 1982: 10). In this sense, I. Santos Gargallo (2017) establishes three criteria that define these processes: sociolinguistic, psycholinguistic, and educative.

CRITERIA	ACQUISITION	LEARNING
PSYCHOLINGUISTIC	Subconscious process.	Conscious process.
SOCIOLINGUISTIC	Linguistic community of the target language.	Educative context.
EDUCATIVE	There is no incidence since it is developed through the interaction with native speakers.	Activities that encourage the usage and reflection concerning the functioning of the linguistic system.

Table 1. Taxonomy of the criteria that define acquisition and learning. Source: I. Santos Gargallo (2017: 20).

Despite the considerations that deny the possibility of an acquisition process once the critical period has finished, S. D. Krashen claims that this process “does not disappear at puberty” (S. D. Krashen, 1982: 10).¹ In fact, this author argues that adults can still make use of this unconscious process, although they might not be able to achieve native-like skills in their second language (S. D. Krashen, 1982). Nevertheless, it is relevant to notice that the CEFR (2020) argues that it is possible to use acquisition and learning interchangeably because there is not always a clear-cut differentiation between these terms.

Considering the relation of teaching and learning processes in terms of the students’ attitude towards them, Vivian Cook (2008) points out certain differences in terms of the psychological state of the learners, which contributes to their success in the learning process:

SLA research [...] has established that the students’ diverse motivations for learning the second language affect them powerfully [...]. Some students see learning the second language as extending the repertoire of what they can do; others see it as a threat. (8)

In this sense, the idiosyncratic features of each student play a fundamental role in both, teaching and learning processes, since, as V. Cook (2008) claims, “what is happening in the class is not equally productive for all the students because their minds work in different ways” (V. Cook,

¹ The critical period, as Jan Vanhove (2013) explains, is a term introduced by Penfield and Roberts in 1959 and developed by E. Lennenberg in the decade of the 1960s. This term states that the language acquisition process must be conducted between a certain period – from childhood to adolescence – to reach native-like skills in the language taught.

2008: 8). Due to the possible interpersonal differences that may emerge, the usage of certain teaching methodologies would influence the learning process. In fact, the major constituents of a methodology are summarized by V. Cook (2008) as follows:

A teacher who wants to use a particular technique will benefit by knowing what it implies in terms of language learning and language processing, the type of student for whom it is most appropriate, and the ways in which it fits into the classroom situation. (9)

Concerning the main objectives that language teaching is focused on, it is important to emphasize the fact that they can vary according to the educational period in which the learner is inserted, the country and the period of time one is dealing with (V. Cook, 2008). In this way, some of the main aims of second language teaching and learning are: “brain training and logical thinking [;] [...] appreciation of serious literature; the student’s increased self-awareness and maturity; the appreciation of other cultures and races; communication with people in other countries” (V. Cook, 2008: 9). Moreover, the CEFR (2001) clarifies that there exist some general and specific competences that learners should develop during the learning process.² The general competences stated by the CEFR (2001) are:

- **Declarative knowledge (savoir):** It includes world knowledge – emphasising world knowledge about the foreign country where the language is spoken and the knowledge that each learner is assumed to know –; sociocultural knowledge, which is essential since it provides a more realistic perspective about other cultures and individuals than the stereotypes, and intercultural knowledge, which requires a relation between the own culture and the target one.
- **Abilities (savoir-faire):** It involves practical capacities – such as social, professional, leisure and daily practical skills –, and intercultural abilities.
- **Existential competence (savoir-être):** It considers all the psychological features that help to construct the identity of the learners and which of them are necessary in the learning and teaching processes.
- **Learning competence (savoir apprendre):** It highlights the necessary development of certain mechanisms of the target language system and the required skills – auditory, analytical, and autonomous – in the learning process.

² Even though the current version of the CEFR (2020) has been consulted and it does mention all these general competences, it seems to be more focused on the explanation concerning what the specific communicative competences consist in. Therefore, the CEFR (2001) has been employed to illustrate which aspects are entailed in each general competence.

Moreover, the CEFR (2020) indicates specific communicative competences within this field:

- **Linguistic competence:** It regards the production and comprehension of both sign language repertoire and the diagrammatical accuracy as indispensable resources to evaluate the variety and the correct usage of vocabulary and grammar of the second language.
- **Sociolinguistic competence:** It includes elements that are related to sociolinguistic appropriateness – such as being able to identify and to express the appropriate register, recognizing and acting according to politeness and social conventions – and cultural and regional knowledge – such as being aware of the local culture –.
- **Pragmatic competence:** It emphasizes on the production and comprehension of speech acts in communicative situations and the implicit meaning in both face-to-face communicative contexts and written discourses.

All these competences favour the development of a plurilingual competence which improves not only the awareness of the linguistic dimension and the intercultural aspect that learning languages provide to the student. In fact, it also encourages to respect the diversity of languages and cultures so that students can construct a linguistic-cultural identity that allows them to expand the limits of their learning through its usage in communicative situations (CEFR, 2020). Moreover, the *Common Digital Competence Framework for Teachers* (2017), adds digital competence as an indispensable aptitude that students must acquire during the learning period since it provides the required knowledge to use efficiently the resources that technological advances offer and to actively participate in a more globalized and specialized society.

Once defined the field of second language teaching and described some of its goals, it is relevant to highlight its relation to applied linguistics to comprehend how one should consider it within the linguistic science.

2.1.Second Language Teaching and its relation to Applied Linguistics

The second language teaching field had presented some problems due to its relation to applied linguistics. The different attempts to define what the main focus of applied linguistics should be, as Alan Davies and Catherine Elder (2004) suggest, have showed that “there is not

always a clear-cut” (A. Davies & C. Elder, 2004: 11). In this way, it seems relevant to understand the scope of applied linguistics so that a clear relation and delimitation can be established. Indeed, one must realize that the linguistic discipline is based on a theoretical dimension and a practical orientation. In this sense, Alan Davies and Catherine Elder (2004) propose the following distinction:

While linguistics [theory] is primarily concerned with language in itself and with language problems in so far as they provide evidence for better language description or for teaching a linguistic theory, applied linguistics is interested in language problems for what they reveal about the role of language in people’s daily lives and whether intervention is either possible or desirable. (11-12)

On this basis, one can conclude that there exist two essential orientations in the linguistic science. However, different approaches concerning the focus of this practical dimension have emerged through history. According to Robert B. Kaplan (2012), there were three essential events that provoked the emergency of applied linguistics during the decades of the 1930s and the 1940s: the foundation of the Summer Institute of Linguistics in 1934 and the English Language Institute in 1941 in Michigan and the publication of the journal *Language Learning: A Journal of Applied Linguistics* in 1948 (R. B. Kaplan, 2012). These last two events are remarkably important, since applied linguistics was considered as “exclusively constrained to teaching English as second language” (R. B. Kaplan, 2012: 4).

Nevertheless, this traditional view is imprecise since the social problems in which languages are involved are so numerous that it cannot exclusively refer to teaching English in the language teaching field. In fact, I. Santos Gargallo (1993) points out that applied linguistics has evolved gradually to cover all the social problems where the use of language is involved. This point is of utmost importance because I. Santos Gargallo (1993) alludes to J. Sánchez Lobato and F. Marcos Marín (1988) to differentiate between the traditional fields which applied linguistics was focused on and the new fields of study and intervention. (I. Santos Gargallo, 1993). In this way, the foundation of the International Association of Applied Linguistics in the 1960s was a significative point in the evolution of the practical orientation of the linguistic science, since it has included and organized the different domains that belong to applied linguistics since its first congress until the present time (AILA, 2020).³ This fact is explained considering the needs of

³ The domains of applied linguistics are signalled by I. Santos Gargallo (1993), which includes both, the traditional ones – language teaching, translation, and interpretation – and the new ones - detection and analysis of linguistic pathologies, the development of analysis of errors in informatics, texts analysis or computer translation. Indeed, these domains were included by AILA (2020), which points out more recent research networks – such as intercultural mediation in language and culture teaching and learning, mobile gaming in language learning and teaching or race, gender, sexuality, and language.

more globalized societies, in which several issues related to the use of language exist, and they require the intervention of applied linguistics. However, I. Santos Gargallo (1993) claims that, «a pesar de la diversidad de temas por los que se interesa la Lingüística Aplicada, el aprendizaje y enseñanza de una segunda lengua constituye el área de estudio más importante» [despite the variety of the fields that applied linguistics is interested in, second language teaching and learning is the most important field of study] (I. Santos Gargallo, 1993: 23).

In spite of the inaccuracy of this terminological perception of applied linguistics, C. Brumfit (1995) proposed a definition of its main goal by stating that applied linguistics is concerned with “the theoretical and empirical investigation of real-world problems in which language is a central issue” (C. Brumfit, 1995: 27). In this sense, this definition highlights the application of theoretical knowledge from linguistic theory to the resolution of social problems in which language is involved. Even though this definition demonstrates its social value, it presents an obstacle, that is its autonomous nature. Due to the multitude of issues that exists in each society, applied linguistics cannot use purely linguistic theory to address them. Instead, as H. Widdowson (2006) declares, applied linguistics “itself is said to be interdisciplinary by definition” (H. Widdowson, 2006: 94). Alison Sealey and Bob Carter (2004) develop this idea by stating that “applied linguistics is of necessity an interdisciplinary practice. It has to be so since it only exists by virtue of a kind of productive relationship with other disciplines” (A. Sealey & B. Carter, 2004: 248). In this way, the current scope of linguistics goes beyond the traditional limits as a scientific and social discipline, which covers all the fields in which a language is involved.

Therefore, one can notice the interdisciplinary nature of this practical orientation of linguistics. In this way, one must consider the relation between applied linguistics and psycholinguistics to provide a broader perspective concerning the contribution of both scientific disciplines to the second language teaching field.

2.2. Applied Linguistics and Psycholinguistics under the Scope of Second Language Teaching

The interdisciplinarity is one of most essential features that defines applied linguistics since it shares the object of study with other scientific fields. In this way, as I. Santos Gargallo (1993) states, «la Psicolingüística, resultado del trabajo conjunto de lingüistas y psicólogos, es el estudio científico de los comportamientos verbales en sus implicaciones psicológicas»

[Psycholinguistics, which emerged as a result of the collaboration of linguists and psychologists, is concerned in the study of verbal behaviour in their psychological implications] (I. Santos Gargallo, 1993: 23). Considering some of its interests, it is important to highlight the study of learning languages as a cognitive process, research on the native language acquisition process and the second language learning (I. Santos Gargallo, 1993).

The relation between applied linguistics and psycholinguistics within the framework of second language teaching, as S. Krashen (1982) states, is constituted by the knowledge offered by second language acquisition theory, the usage of applied linguistics research to elaborate an appropriate methodology and the ideas and intuitions from part of the students that take place during the teaching and learning processes. Indeed, this author firmly claims that:

The three approaches should influence and help each other. It seems obvious, first of all, that researchers would be interested in the results of applied research, since such experiments can provide potential confirming and counter evidence for theories of second language acquisition. Similarly, it stands to reason that applied linguistics researchers should pay some attention to strictly theoretical research, since a successful theory might give researchers deeper insight into the results of their studies. (4)

Due to this fact, both linguistics and psycholinguistics contributed to the creation of the scientific basis that supports the second language teaching field (I. Santos Gargallo, 1993). In this way, as I. Santos Gargallo (1993) explains, the emergence of new didactic resources, techniques and the data provided by research projects concerning the second language process created the fervent climax in which new methodologies were developed in the context of second language teaching, which were focused on the mental processes that lied beneath the learning process. In this sense, P. Strevens (1977) pointed out that the so-called learner-centred education, which is based on the emphasis of the necessities, aptitudes, attitude, motivations, and contribution of the learner within the teaching and learning processes, outpaced the teacher-centred methodology. This occurrence is of remarkably importance, since it offers a more realistic perception of both processes, teaching and learning, and it also contributes to increase their success in the learning process when considering the attributes previously mentioned.

The contribution of applied linguistics and psycholinguistics to the field of second language teaching is of utmost importance due to the arrival of new studies and research projects that improved the perception of teaching and learning. In this sense, special attention should be paid to contrastive linguistics, since it is one of the most decisive methodologies used in the contribution and development of the field of second language teaching.

3. Second Language Teaching: Contrastive Linguistics

Contrastive linguistics, as Alan Davies (2007) defines it, is “a method of exploring structural similarities and differences between languages” (A. Davies, 2007: 161). Jacek Fisiak (1981a) declares the need to distinguish between two different ways in which a contrastive analysis can be accomplished:

Theoretical contrastive studies give an exhaustive account of the differences and similarities between two or more languages, provide an adequate model for their comparison, and determine how and which elements are comparable, thus defining such notions as congruence, equivalence, correspondence, etc[...]
Applied contrastive studies are part of applied linguistics. Drawing on the findings of theoretical contrastive studies they provide a framework for the comparison of languages, selecting whatever information is necessary for a specific purpose, e.g. teaching, bilingual analysis, translation. (2)

On that basis, one can realize that theoretical contrastive studies were expected to find linguistic universals through the comparison of languages. However, the applied approach of this technique is the direction which contrastive linguistics focuses on when referring to the relation between applied linguistics and its purpose in second language teaching. Due to the interdisciplinary nature of applied linguistics, this method “must necessarily depend not only on theoretical, descriptive, and comparative linguistics but also on other disciplines relevant to teaching; among them are psycholinguistics, sociolinguistics, didactics, psychology of learning and teaching” (T. P. Krzeszowski, 2011: 10-11).

Regarding the origins of contrastive linguistics, it is relevant to notice that it emerged due to the impact of the Second World War, which provoked the fervent climax for cooperation of both structural linguistics and behaviourist psychology to examine and elaborate more efficient methods and materials for teaching languages (M. H. Keshavarz. 2012: 3). In this way, the literature that ushered this practical orientation of contrastive linguistics can be found in Charles Fries’ publication, *Teaching and Learning English as Foreign Language*, among others, which constituted the basis of the first contrastive grammars in the 1940s (M^a. M. Galindo Merino, 2009). Subsequently, Robert Lado applied both the behaviouristic psychological theory and the structuralist theory to Fries’ ideas in his work *Linguistics across Cultures: Applied Linguistics for Language Teachers* (1957) (M^a. M. Galindo Merino, 2009). As this author states, Robert Lado was the first author to carry on a contrastive analysis by applying the result of previous theoretical works from structuralism and behaviourism to the second language teaching field. The purpose of his analysis is fully explained in his work *Linguistics across Cultures* (1957):

The plan of the book rests on the assumption that we can predict and describe the patterns which will cause difficulty in learning and those that will not cause difficulty by comparing systematically the language and culture to be learned with the native language and culture of the student. In our view, the preparation of up-to-date pedagogical and experimental materials must be based on this kind of comparison. (Preface: p.VII)

Furthermore, the application of both theories, behaviourism and structuralism, provoked the creation of the contrastive hypothesis, which has been criticised and reinterpreted several times through history (M^a. M. Galindo Merino, 2009). Indeed, one can distinguish two versions of this hypothesis, the strong and the weak version.⁴ In general terms, the strong view of the contrastive hypothesis claims that the “knowledge of the native language will inhibit learning of the target language, and that this interference will be greatest at the points of greatest difference” (J. W. Oller, Jr. & S. M. Ziahosseiny, 1970: 185). According to Natascha Müller (1998), this version of the contrastive analysis hypothesis vindicates the following procedure during language learning:

The L2 learner transfers his L1 knowledge into his developing L2 system. Where the L2 differs from the L1, transfer has a negative effect (‘difference’ = ‘difficulty’); where the L2 is similar to the L1, transfer has a positive effect and thus facilitates the learning task. (153)

In this sense, learners make use of their linguistic knowledge provided by their mother language while the process of second language learning occurs. On the contrary, the weak version denies that the linguistic knowledge from the mother tongue could impede or conduct erroneous production in the second language, “but that the greatest difficulty will occur where the greatest difference exists” (J. W. Oller, Jr. & S. M. Ziahosseiny, 1970: 186). Due to the critics and restrictions that both hypotheses presented in their application, a moderate version of this hypothesis emerged as a possible alternative interpretation of it. (J. W. Oller, Jr. & S. M. Ziahosseiny, 1970).

Therefore, it is relevant to mention how contrastive linguistics has evolved. As a result of the emergence of different linguistic theoretical theories during the twentieth century – such as structuralism, transformational-generativism and psychological models –, it is relevant to distinguish three research models within contrastive linguistics: contrastive analysis, error analysis and interlanguage (I. Santos Gargallo, 1993). Due to their own particularities, I. Santos Gargallo (1993) explains them separately:

⁴ John W. Oller, Jr. and Seif M. Ziahosseiny (1970) attribute the distinction of two version of the contrastive analysis hypothesis to Ronald Wardhaugh.

- **Contrastive analysis:** This analysis centres its investigation on the interlinguistic comparison between the first language and the second language in all linguistic levels to carry out predictions of possible learning difficulties that will serve as a support to emphasize on them in the learning process through the elaboration of didactic materials. (I. Santos Gargallo, 1993).
- **Interlanguage:** This concept refers to a temporary stage in which a learner uses an autonomous linguistic system in the process of learning a second language. It affirms that the focus should be placed on the student's mind as he/she has inner linguistic structures that somehow shows up during the learning process, which requires a whole investigation of the student's first language (I. Santos Gargallo, 1993).
- **Error analysis:** According to I. Santos Gargallo (1993), error analysis is a transitional point between the previous analyses mentioned. Indeed, error analysis emerged in the last years of 1960 as a response to the criticisms toward the first contrastive analysis approaches conducted. It has its roots in N. Chomsky's generativist theory and cognitivist psychology and offers a wider overview of the sources of possible difficulties considering how individuals interact with the reality that surrounds them (I. Santos Gargallo, 1993).

In spite of the distinctions, the fact that these three methods aim to achieve the same objective is precisely what leads to believe that they can complement each other (I. Santos Gargallo, 1993).

Therefore, the developments in the linguistic field have had a direct influence on both the evolution of contrastive linguistic and the methodology employed to achieve its goals. Due to the significant contribution that contrastive analysis provided, not only to the basis of contrastive linguistics but to the second language teaching field, it is indispensable to regard the origins and evolution of this analysis in detail.

3.1. Contrastive Analysis

Contrastive analysis, as Paul Lennon states in his work *Contrastive analysis, Structuralist linguistics and Behaviourist psychology* (2008), is concerned about the possibility "to identify the areas of difficulty a particular foreign language will present for native speakers of another language by systematically comparing the two languages and cultures" (P. Lennon, 2008: 51). In fact, according to Muriel Saville-Troike (2006), contrastive analysis "was heavily influenced

by theories which were dominant in linguistics and psychology within the USA through the 1940s and the 1950s” (M. Saville-Troike, 2006: 34).

According to Tomasz P. Krzeszowski (2011), this analysis “consist[s] of three steps [...]: (1) description; (2) juxtaposition; (3) comparison, i.e., contrastive analysis in the strict sense” (T. P. Krzeszowski: 2011: 35). On this basis, Tomasz P. Krzeszowski (2011) defines description as the indispensable initial step when conducting a contrastive analysis because of the evident need of a conceptual framework of the languages which are going to constitute the object of study. Once the descriptive stage is accomplished, one must focus on “what is to be compared with what” (T. Krzeszowski, 2011: 36). In other words, this step implies the selection of linguistic elements of both languages that are the focus of the analysis. Nevertheless, this decision must be taken prudently since one can compare elements according to a certain criterion related to their semantic-syntactic equivalence. Finally, the comparison process is described by Muriel Saville-Troike (2006) as follows:

The process of CA involves [...] analyzing roughly comparable segments of the languages for elements which are likely to cause problems for learners. This information provides a rationale for constructing language lessons that focus on structures which are predicted to most need attention and practice, and for sequencing the L2 structures in order of difficulty. (35)

As previously mentioned, Robert Lado’s *Linguistics across Cultures: Applied Linguistics for Language Teachers* (1957) is considered as the main pioneer in the contribution to the language learning field due to the combination of the major theories of psychology and linguistics at that time: structuralism and behaviourism. This point is of utmost importance due to the influence of B. F. Skinner’s behavioural ideas about language learning on this analysis (M. H. Keshavarz, 2012). In this way, the impact of B. F. Skinner’s *Verbal Behaviour* (1957) in contrastive analysis is explained in terms of what this author named operant conditioning: Skinner considered that any linguistic production can be rewarded or eliminated through the submission of operant conditioning, which consists in the use of reinforcements in order to control learners’ verbal utterances. In this sense, when a linguistic input – or stimulus – is uttered to the learners, correct productions would be praised by positive reinforcements, whereas mistakes would receive negative reinforcements. Thus, Skinner’s operant conditioning serves as a procedure based on the relation stimulus-answer in which each utterance would receive a reinforcement, either to favour it or to eliminate it.

Robert Lado’s approach of interlinguistic contrast had value in the second language teaching and learning field. In his work, *Linguistics across Cultures: Applied Linguistics for Language*

Teachers (1957), this author encouraged teachers to examine both, the linguistic and the cultural components of the textbooks used while teaching since R. Lado (1957) considered that teachers should have focussed their attention on structures that can produce problems in the learning process as a result of the linguistic contrast. Moreover, this author vindicated the relevance of the contrastive analysis by stating the new teaching materials of his time must have been based on this juxtaposition and that teachers were able to create additional materials to highlight those aspects that former textbooks did not explain – alluding to the difficulties that occur during the learning process – (R. Lado, 1957). Finally, R. Lado (1957) built an image of a teacher as a specialist that predicted the issues that his/her students faced in the performance of the second language. In his own words:

Knowing not only what the pattern is, but knowing precisely what feature in that pattern is troubling the student and what different feature he is substituting can lead to a simple hint or pointer that may solve an otherwise baffling situation. (3-4)

Therefore, the methodology used in language teaching and learning environments during this earlier phase of contrastive analysis consisted in, according to A. Davies and C. Elder (2004), the audio-lingual method, that is, the verbal repetition of certain linguistic structures so that students would learn a language through a positive reinforcement when they prove to have learned the structure correctly, and the immediate correction of wrong productions from part of the teacher.

This conception of contrastive analysis, according to John W. Oller, Jr. and Seid M. Ziahosseiny (1970), favours a strong version of the contrastive hypothesis by stating that “wherever there are differences between the student’s native language and the target language, there will be interference from the native language” (J. W. Oller, Jr. and S. M. Ziahosseiny, 1970: 184). Regarding this definition, the concept of language distance seems to be relevant as it constitutes the basis of its hypothesis. Language distance, according to E. Gutiérrez Quintana (2004), determines the possibility of existent difficulties in the learning process due to the degree of distance between the mother tongue and the second language. Consequently, this hypothesis suggests that this phenomenon can cause an inappropriate production of linguistic items from the students’ mother tongue in the second language when there is a high distance between them.

Transfer and interference are two fundamental terms to understand the essence of this strong version of the contrastive analysis hypothesis. Thus, it is relevant to understand how these terms have been used to explain the language learning process.

3.1.1. Transfer and Interference under the Scope of Early Contrastive Analysis

Transfer and interference, according to M^a. M. Galindo Merino (2009) are two terms that belong to the bilingualist paradigm which were introduced in the Language Teaching and Learning by U. Weinreich's publication *Languages in Contact* (1953). In this sense, Robert J. Di Pietro (1971) provides the following definition of these terms: "the process of interpreting the particular grammar of one language in terms of another is called *transfer*. The mistakes that result from this process are said to be due to *interference*" (R. J. Di Pietro, 1971: 6). A more recent terminological explanation is provided by the online version of E. Martin Peris' *Diccionario de términos clave de ELE* (2008). In this sense, transfer is understood as the cognitive process involved in the usage of certain linguistic knowledge provided by the native language of an individual in the process of learning a second language. For its part, interference – which can be identified as negative transfer – is referred to all those mistakes that are caused when a divergence between the mother tongue and the second language exists concerning a certain linguistic item, which may lead to obstacles or difficulties in their learning process.⁵

Contrastive analysis that was conducted during the decade of 1950 and part of 1960 was firmly influenced by the strong version of contrastive analysis hypothesis. Thus, the implementation of these terms in this analysis follows a path of emphasizing structures according to the proximity or distance between the native language and the second language. In this way, Muriel Saville-Troike (2006) explains how these terms functioned under the structural-behavioural contrastive analysis approach:

There will be transfer in learning: [...] this means the transfer of elements acquired (or habituated) in L1 to the target L2. The transfer is called positive (or facilitating) when the same structure is appropriate in both languages, as in the transfer of a Spanish plural morpheme -s on nouns to English (e.g. *lenguajes* to *languages*). The transfer is called negative (or interference) when the L1 structure is used inappropriately in the L2, as in the additional transfer of Spanish plural -s to a modifier in number agreement with the noun. (35)

In this way, Muriel Saville-Troike (2006) provides a taxonomy of different interferences – or negative transfer – that can occur according to the degree of difficulty: Structures whose form and meaning are identical in both languages, but they vary in their distribution; structures which

⁵ I. Santos Gargallo (1993) warns the reader about the terminological distinction concerning the term interference. Even though U. Weinreich introduced the terms, his idea of interference was more related to bilingual issues in communicative situations, but not really to the language learning process.

have an equal meaning, but their form is different; structures which, as in the previous case, share a similar meaning, but their form and syntactic order are opposed; structures that differ in their form, but a semantic overlap exists between these languages, and structures that do not share the same meaning, although there exists a similitude in terms of their form.⁶

3.1.2. Criticisms to Contrastive Analysis

The emergence and development of new theories in both fields, linguistics and psychology, ushered the collapse of this approach. In fact, as Rosamond Mitchell (2013) states, structuralism and behaviourism lost their privilege positions during the 1950s and 1960s:

Linguistics saw a shift from structural linguistics, which was based on the description of the surface structure of a large corpus of language, to generative linguistics, which emphasized the rule-governed creative nature of human being [...]. In the field of psychology, the pre-eminent role for the environment in shaping the child's learning and behaviour was losing around in favour of more developmentalist views of learning, such as Piaget's cognitive developmental theory, in which inner forces drive the child, in interaction with the environment. (30)

Indeed, according to Rosamond Mitchell (2013), Noam Chomsky's reviews of Skinner's *Verbal behaviour* was the central publication that firmly criticises this contrastive analysis approach in 1959. The two major critiques pointed out by N. Chomsky indicates that learning could not consist in the repetition of certain structures and that children could not carry out a passive role in the process of learning a second language.

Firstly, one must notice that the process of learning a language goes beyond the mere composition of structures under a stimulus-response scope which reinforces the correct uses and emphasize the correction of the mistakes. (N. Chomsky, 1959). In fact, N. Chomsky claims that:

The construction of a grammar which enumerates sentences in such a way that a meaningful structural description can be determined for each sentence does not in itself provide an account of this actual behaviour. It merely characterizes abstractly the ability of one who has mastered the language to distinguish sentences from nonsentences (56)

On this basis, it is essential to comprehend N. Chomsky's perception of the nature of language since N. Chomsky realized that human beings are able to identify and understand utterances

⁶ It is of utmost importance to highlight that the taxonomy offered by Muriel Saville-Troike (2006) is based on Robert Lado's examples of contrasting Spanish and English structures in his book *Linguistics Across Cultures: applied Linguistics for Language Teachers*, published in 1957.

that have never been formulated before, and that this faculty is due to the presence of an inner grammar that is universal to all human beings (N. Chomsky, 1959).

The second criticism, which is related to the first one, vindicates the fascinating essence of human ability to acquire language. N. Chomsky observes that learning languages is a really difficult issue, but that children are able to acquire and develop grammar afresh and without difficulties through the exposition of linguistic inputs. (N. Chomsky, 1959). In this sense, children are precisely the major participants involved in the process of learning languages rather than a passive actor that learns through reinforcements. In fact, this last vision, as N. Chomsky (1959) states, “permits only a superficial account of language acquisition” (N. Chomsky, 1959: 58).

Furthermore, John W. Oller, Jr. (1972) criticises its failure to predict errors since, as this author explains, “contrastive analysis as it has been done to date does *not* predict some errors which do occur and *does* forecast some which never seem to materialize” (J. W. Oller, Jr., 1972: 96). This criticism is related to Terence Odlin’s perspective, who argued that a wrong interpretation and implementation of the term transfer has been done when dealing with language teaching and learning processes (T. Odlin, 2012):⁷

Firstly, the behaviouristic pretension of the contrastive analysis of that time, which considered the process of transfer as the mere formation of habits, is inviable. Due to the fact the first stages of contrastive analysis were based on the strong contrastive analysis hypothesis, it was believed that “the behavio[u]rist notion of transfer often implies the extinction of earlier habits” (T. Odlin, 2012: 25). Nevertheless, this author explains that, even if negative transfers occur as a result of applying the native language knowledge into the performance of the second language inappropriately, it can never be such decisive to influence in the mother tongue. (T. Odlin, 2012)

Furthermore, T. Odlin (2012) illustrates that transfer cannot be identified to interference since they define different phenomena. However, they must be related in terms of the similitude between interference and negative transfer (T. Odlin, 2012). Finally, this author points out that transfer, either positive or negative, is not always the result of the native language effect but, rather, the “knowledge of three or more languages can lead to three or more different kinds of source language influence” (T. Odlin, 2012: 27).

⁷ It is important to notice that Terence Odlin (2012) does not make any terminological distinction between the terms acquisition and learning.

Due to these criticisms, this behaviourist-structuralist contrastive analysis approach was discredited. However, M. Saville-Troike (2006) acknowledges its enormous contribution to the field of second language teaching and learning: it allowed the elaboration of numerous comparative-grammars; its analysis was applied in both, translation tasks and descriptive studies, and its procedures have been re-examined and extended to cover areas of cross-cultural communication and rhetoric.

3.1.3. Revision of Contrastive Analysis: Alternative Hypotheses

Due to the several critiques that contrastive analysis received, a revision of its approach was done by focusing on the strong version of the contrastive analysis hypothesis. According to R. Wardhaugh (1970), the weak version of the contrastive analysis hypothesis emerged as an alternative to the strong version due to the difficulties and limitations that it presented. In his own words:

The weak version requires of the linguist only that he use the best linguistic knowledge available to him in order to account for observed difficulties in second language learning. [...] It starts with the evidence provided by linguistic interference and uses such evidence to explain the similarities and differences between systems. [...] The starting point in the contrast is provided by actual evidence from such phenomena as faulty translation, learning difficulties, residual foreign accents, and so on, and reference is made to the two systems only in order to explain actually observed interference phenomena. (126-127)

In this sense, this weak version explains the possible similarities and contrarities between the languages that are part of the object of study by considering the linguistic interference between them. Thus, the major contrast between the strong version and the weak version is that the latter does not focus on the prediction of difficulties, but it is centred on their explanation when they occur during the learning process (R. Wardhaugh, 1970). This new version stirred up the field of second language teaching and learning since, according to Brown (2007), “teachers can utilize their knowledge of the target and native languages to understand sources of errors” (H. D. Brown, 2007:222).

Moreover, M. H. Keshavarz (2012) points out that, this version seems to be more functional as it “recognizes the significance of interference across languages, the fact that such interference does exist and can explain difficulties” (M. H. Keshavarz, 2012: 11). However, this version presents a restriction in its formulation. According to M. H. Keshavarz (2012), both, the strong and the weak version, based their assumption on the concept of negative transfer – or

interference – as the source of all the linguistic difficulties that take places during the teaching and learning processes. Nevertheless, the information provided from a study conducted by John W. Oller, Jr. and Seid M. Ziahosseiny (1970) concerning the influence of interference in the learning process of non-Roman and Roman spelling illustrates the invalidity of this reflection:

With respect to English spelling [,] the weak version of the CAH predicts that student whose native language uses a non-Roman script will have equal or greater difficulty than a student whose native language uses a Roman alphabet. The latter students would simply have less to learn. According to this hypothesis [,] we would expect these students to do better because of greater positive transfer, but we would be wrong in the light of the data of the present study. (185)

The results of this experiment showed that individuals whose language was a Romance language had more difficulties than students whose language was not a Romance language. Indeed, the percentage of spelling errors committed by Non-Roman students was 33.71%, in contrast to the 46.28% of the errors made by Roman students (John W. Oller, Jr. and Seid M. Ziahosseiny, 1970). Therefore, it seems evident that, even though interference has an influence in the difficulties that emerges in the learning process, it could not be the only plausible source of them.

In a context where both extremes of the contrastive analysis hypothesis were discredited, John W. Oller, Jr. and Seid M. Ziahosseiny (1970) considered an intermediate point and formulated the so-called moderate version of contrastive analysis hypothesis. In their own words: “This version of the CAH suggests that the learning of sounds, sequences and meanings will be the most difficult where the most subtle distinctions are required either between the target and native language, or within the target language” (John W. Oller, Jr. and Seid M. Ziahosseiny, 1970: 186). Thus, difficulties could arise from either the interlinguistic distinctions or from intralingual deviations that lead the students to confusions and, consequently, to produce them. In fact, these authors believed that intralingual errors tended to occur more frequently than interlinguistic errors due to a major percentage of similar structures in a certain language than between languages (John W. Oller, Jr. and Seid M. Ziahosseiny, 1970). In this sense, this version, according to M. H. Keshavarz (2012), did a significant contribution to the development of contrastive analysis, since it does not only establish interference as the unique factor involved in contrastive analysis, but it paid special attention on the individual as the main agent that participates in the learning process.

3.1.4. Alternative Contrastive analysis models

The early stages of contrastive analysis were influenced by structuralism and behaviourism. Nevertheless, it was not the only theoretical approach that conducted this kind of analysis. Indeed, as I. Santos Gargallo (1993) claims, one can distinguish another three approaches of contrastive analyses apart from the one carried out by R. Lado. These are, generativist, psycholinguistic and a mixture of structuralism, generativism and psycholinguistic perspective.

Generative contrastive analysis approach was based on the influence of the transformational-generative linguistic model, which provoked a revolution of the previous paradigm, since it was not focused on contrasting structures, but on grammatical rules. According to T. Krzeszowski (1981), this contrastive analysis “results in statements about the obligatory or optional status of the compared rules, their ordering and their presence or absence in the compared languages” (T. Krzeszowski, 1981: 72). In this way, both equivalence and interference play an essential role in this approach since while the first term alludes to the assumption that only equivalent rules can be objects of contrast, the second one occurs because of the processes that generate structures according to a given rule-grammatical system (I. Santos Gargallo, 1993). Ultimately, T. Krzeszowski (1981) proposed this approach basing it on the complication concept, which involves a vertical development from a simple, basic language system to a well-formed linguistic competence in the second language. T. Krzeszowski (1981) explains this process as:

The vertically organized contrastive grammar is founded upon a universal semantic or conceptual input consisting of configurations of elementary, primitive notions such as Agent, Patient and all sorts of specifications of location in time and space. Such universally structured configurations are assumed to underlie equivalent constructions and sentences across languages. (79)

Psycholinguistic models of contrastive analysis, for its part, were based on T. Slama Cazacu’s perspective of the process of language learning, regarding the situation of language contact in which an individual pretend to manifest a speech act and, consequently, he/she wants it to be successfully interpreted (I. Santos Gargallo, 1993). Thus, this model proposed that interference is basically a product of the dynamic influence of the first and the second language and that its goal is to discern what could be similar or not. (I. Santos Gargallo, 1993). Moreover, it was focused on what Dell Hymes defined as communicative competence, that is, the human capacity to communicate with other individuals in a given context, considering that

communication can be conducted verbally and through body language and that it can vary depending on the communicative context (I. Santos Gargallo, 1993). The fact that this analysis included the communicative competence is essential, as it did not only consider the linguistic competence, but it also paid attention to the pragmatic paradigm (I. Santos Gargallo, 1993).

Finally, Santos Gargallo (1993) states that there were works whose basis can be traced in both structuralism and transformational-generativism, since, individually, they were not as well-formulated to provide clear results as they only focused on the competence, leaving apart the performance of the linguistic structure or rule invested in the contrast. However, this author suggests that the collaboration of both approaches with the speaker's performance of the linguistic item invested – which is a contribution from the psycholinguistic model – do provide evident and complete results if these three components are regarded equally in terms of relevance and usage (I. Santos Gargallo, 1993). In this way, this author explains the procedure of this model as follows: the structuralist theory would be applied to classify the element that is going to be studied while the transformational-generativism theory would be used to conduct out their contrast according to their linguistic rules. On the other hand, the usage – that can be identified as the performance of language in communicative situations – would show evidences of the results according to the context where the linguistic item is produced (I. Santos Gargallo, 1993).

3.2. Current Contrastive Analysis: Responses to the Critics and its Reinterpretation

Despite the criticisms and obstacles that contrastive analysis suffered in its earlier phase, J. Fisiak (1981a) defended this analysis by stating that this analysis had not been well-interpreted. This author explains that some confusions arose due to methodological unawareness, inaccurate distinction between theoretical and applied contrastive linguistics, misinterpretation of how contrastive studies, interference, errors and second language learning theory were related to each other within the same paradigm and, remarkably important, a wrong regard about the relation between contrastive analysis and linguistic theory (J. Fisiak, 1981a). This author provides answers that refute these arguments, proving that contrastive analysis is a valid qualitative technic.

Firstly, J. Fisiak (1981b) claims that part of the contrastive linguistic history has been forgotten and that contrastive linguistics cannot be considered as a mere extension of applied linguistics. Indeed, the theoretical orientation of contrastive linguistics prevailed during the last

decade of the nineteenth century and the beginning of the twentieth century, but it was outpaced by the applied orientation in language teaching as a consequence of the Second World War outbreak and R. Lado's publication (J. Fisiak, 1981b). This fact led this theoretical orientation to be only acknowledged by both translation and language typology fields. (J. Fisiak, 1981b). However, J. Fisiak (1981b) also anticipates the dangers of misinterpreting contrastive linguistics at that time since, in the US:

[...] works which were not essentially pedagogical were nevertheless considered to be such and consequently had to take the blame for the failure of CL, though they were either not designed to attain the practical goals of CL or the goals outlined in them were too ambitious and beyond the reach of properly constructed contrastive grammars. (2)

Therefore, one can notice that contrastive linguistics was sometimes wrong-conceived and, consequently, it was unfairly criticised due to a lack of awareness and knowledge about what contrastive linguistics was – considering its theoretical and applied orientations –, its objectives and how to apply it in the language teaching field appropriately. Despite this confusion, the European perspective helped to recognize the theoretical orientation as well as the practical one, which “seems to have found its proper perspective and a well-deserved place within applied linguistics” (J. Fisiak, 1981b: 3).

Moreover, it is relevant to emphasize that the concept of interference varies depending on the orientation of the contrastive focus. J. Fisiak (1981a) argues that, even though theoretical contrastive studies do not centre its analysis on the prediction of areas of difficulty, the result of applying the interference concept and contextual information in contrastive analysis is what can predict difficulties. In this sense, one can notice the presence and the relevance of a pragmatic perspective in contrastive analysis, which focuses on both competence and performance. It is precisely this reason why J. Fisiak (1981a) argues in favour of the applied orientation of contrastive analysis, denying that linguistic errors can be produced uniquely by interlinguistic influence:

The value and importance of contrastive studies lies in its ability to indicate potential areas of interference of errors. Not all errors are the result of interference. Psychological and pedagogical, as well as other extralinguistic factors contribute to the formation of errors. (7)

According to J. Fisiak's statement, this interpretation of contrastive analysis does not only favour the moderate version of contrastive analysis hypothesis, but it also claims that an appropriate contrastive analysis should consider the merger of structuralist, transformational-

generative and psycholinguistic models to provide a wide scope of the potential difficulties that may occur and to show evidence of them in context.

Finally, J. Fisiak (1981a) claims that contrastive analysis does have an influence on language teaching and learning, but this influence cannot be directly applied to the classroom but, rather, on the reflection and elaboration of appropriate didactic materials which can be *a posteriori* used in a didactic methodology. Indeed, this author argues that it is senseless to use the results of applied contrastive analysis to the classroom since it “will have to select from a contrastive grammar the minimum that students at a certain age and with certain educational and linguistic background can digest” (J. Fisiak, 1981a: 8). Therefore, if one intended to use the results of a contrastive analysis directly and careless, it would not produce any benefits neither on the language learning nor on the teaching process due to the idiosyncratic features of each student. In this sense, the advantages and impact of applied contrastive analysis on language teaching and learning must be regarded on the materials and the methodology that each teacher would apply in the class since, in that way, the results can help to stimulate the learning process of the students.

Therefore, I. Santos Gargallo (1993) argues that contrastive analysis is a valid approach to pinpoint potential areas of difficulty in the learning process, despite the previous critics. Once these potential areas of difficulty have been detected, one can reflect on how to adjust the teaching methodology to make the learning process easier and more comprehensive. Thus, teachers could consider the technological advances that are currently available to improve the teaching process through a more innovative source of information, teaching, and practice.

4. Digital Platforms in Second Language Teaching

Technological advances have significantly improved the quality of life of current societies, which, consequently, demand a more specialized vocational training, specially focused on the appropriate usage of technological tools. In fact, it became so relevant that linguists were interested in how to apply them to the second language teaching area and, as a result, it became one of the central focus of applied linguistics (R. Kaplan, 2002).

During the first decades of the 20th century, the Grammar-Translation method was the predominant methodology used in language teaching classes, but the inclusion of audio-visual tools led teachers to opt for the employment of the so-called Direct-method, which emphasized on the learners’ oral skill (Sue E. Otto, 2017). Moreover, Sue. E. Otto (2017) points out more

innovations that contribute to the application of technological advances to the language teaching environment: phonograph recordings, radio and films were an essential part in the teaching class since they improved the linguistic abilities of the students while providing an appropriate climax where language and culture can be related into the classroom.⁸

During the 1950s and 1970s, B. F. Skinner's behaviourism, which influenced the focus of the contrastive analysis of that time, led to the usage of the audio-lingual method, which consisted in the repetition of certain linguistic structures through audiotapes recorded by a native speaker (Sue. E. Otto, 2017). However, the methodology that seems to have longed in second language teaching and learning area is H. Douglas Brown's communicative language teaching, whose main goal is to "integrate learners to real life situations in order to prepare them for the real world" (Figuerola Flores, 2015: 36). H. Douglas Brown (2007) goes beyond the definition and lists a series of characteristics that are inherent to this approach:

1. Communicative language teaching intends to improve the communicative competence of the learner.
2. This approach is expected to motivate the learners to interact in various communicative situations through the usage of the second language they are learning.
3. Both fluency and accuracy must be regarded equally important in communicative process, even though there may exist certain contexts in which fluency could be considered more relevant to increase the students' motivational attitude.
4. In educative contexts, learners are required to use the second language in both, the production and comprehension processes.

Brown's communicative language teaching approach seeks to improve the learners' communicative competence through social interaction, which laid the foundations of the arrival of digital platforms geared to increase the learner's attitude and competences regarding the second language. However, technological tools may differ in terms of its usage, the device required for its access or its portability. Thus, this atmosphere of technological advances was decisive for the categorization of computer-assisted language learning (CALL) and mobile-assisted language learning (MALL).

⁸ Sue. E. Otto (2017)'s signals that one of advantages of using technological tools during the first half of the twentieth century is the merge of language and culture during the teaching and learning processes. This is of utmost importance since it proves an awareness of the plurilingual competence that each student should acquire.

4.1.Computer-assisted Language Learning and Mobile-assisted Language Learning

Computer-assisted language learning, according to Michael Levy (1997) is “the search for and study of applications of the computer in language teaching and learning” (M. Levy, 1997: 1). In its earlier phase, CALL was influenced by behaviourist ideas of the 1950s and 1960s and, consequently, it was based on the repetition of grammatical structures and translation activities (Figuerola Flores, 2015). Not surprisingly, Sue E. Otto (2017) claims that CALL was hardly recognized as an appropriate tool in language teaching and learning and that it also presented some obstacle to overcome: “Frequently reported barriers to CALL were general suspicion of computers by humanities faculty, lack of recognition of CAI development for tenure and promotion, and the lack diacritical marks and fonts for non-roman scripts” (Sue E. Otto, 2017: 13).

Despite these earlier difficulties, Figuerola Flores (2015) states that cognitivism and most importantly, socio-cognitive theories were applied into the development of CALL, which outpaced the barriers of its earlier phase, and it was centred in creating “an approach toward L2 learners by which listening, speaking, reading, and writing skills where use in combination with the learning of technology tools as an ongoing process for language learning” (Figuerola Flores, 2015: 38). As a result, learners enjoy from a numerous variety of available tools that could stimulate not only their communicative competence, but also their psychological status since they are the major agent in the language learning process.

Due to the evolution of digital platforms, which required more sophisticated and innovated technological advances, new ways of teaching and learning includes “wireless mobile devices – laptops, tablets, and smartphones – to access lessons, to engage in development projects, and interact with other learners” (Sue E. Otto, 2017: 19). Moreover, the possibility to access to Internet via smartphones created the fervent climax where mobile learning flourished. Agnes Kukulska-Hulme (2008) states that “‘mobile learning’ refers to learning mediated via handheld devices and potentially available anytime, anywhere” (A. Kukulska-Hulme, 2008: 273). Thus, this author argues that “MALL [mobile-assisted language learning] differs from computer-assisted language learning in its use of personal, portable devices that enable new ways of learning emphasizing continuity or spontaneity of access and interaction across different contexts of use” (A. Kukulska-Hulme, 2008: 273). In this way, the access to MALL application is not restricted to a unique possibility – such as a computer – but, rather, it includes a variety

of options – such as mobile phones, laptops, tablets or even podcasts – that allow the learners to progress in their educative training at any time.

The arrival of technological advances has influenced the methodologies used in teaching languages, specially considering the current mobile-assisted language learning applications that strengthen the educative competences through self-taught experiences. In this sense, some applications have reflected on the inclusion of tasks shaped as games to stimulate the teaching and learning progresses (I. Rego, 2015).

4.2. The role of Games in Second Language Teaching through MALL applications

Games' tasks in MALL, according to Izabel de Moraes Sarmento Rego (2015), can accomplish an enormous contribution to learning and teaching because they were treated as a way to transmit knowledge since ancient times. Due to its social attraction, games' tasks favour the learning process by teaching in a way that results engaging and challenging, which leads learners to improve their competences by overcoming these tasks. As Kevin Werbach (2014) states, "game-like experiences can promote both motivation (by making activities feel more engaging) and ability (by promoting learning, achievement, and feelings of confidence)" (K. Werbach, 2014: 271). In this way, K. Kapp (2012) defines the concept of gamification as any designed game that is geared to increase the psychological and attitudinal disposition of individuals, to encourage and ease the teaching and learning processes and, most importantly, to solve real-world problems if the tasks proposed by the game fulfil the criteria of game-based mechanic, aesthetics, and game-thinking.

Due to the emergence of Mobile applications as a productive way to stimulate the second language teaching and learning area, an increasing and solid arrival of mobile learning apps geared to fulfil language teaching and learning purposes through games' tasks has been noticed by some authors, such as A. Apandi (2019). Moreover, these applications include games' elements that emphasize both the individual and the social aspects while teaching and learning. In this way, some authors, such as I. Rego (2015) or K. Kapp (2012), have discussed the nature of these elements and, consequently, they have proposed lists of elements that conform these tools. It is important to highlight that Figueroa Flores (2015) claims that these elements can be used in an interchangeable way to adapt their usage to the established goals in any educational background. Therefore, some of the most important elements of games used in mobile learning apps are described as follows:

- **Goals:** Determining which goals must be accomplished by students would allow them to motivate them by overcoming the games and, consequently, progressing in their learning (I. Rego, 2015).
- **Mechanics:** It sets up the own functioning of the gamified application and describes what learners need to do to fulfil the tasks and how they should do them (I. Rego, 2015).
- **Aesthetics:** In fact, I. Rego (2015) alludes to K. Kapp's idea of aesthetic to suggest that a coherent and well-prepared aesthetic significantly contributes to keep the learners engaged while teaching and learning.
- **Game thinking:** This element, according to K. Werbach and D. Hunter (2012), implies "using all the resources you can muster to create an engaging experience that motivates desired behaviours" (K. Werbach and D. Hunter, 2012: 41). In this way, the development of game thinking can stimulate the learning of the second language if docents use games' tasks in his/her methodology critically and analytically (I. Rego, 2015).
- **Collaboration:** Games are thought to be fascinating due to its social nature. Therefore, I. Rego (2015) argues that, even though there may be some individual games' tasks to be performed, mobile learning applications offer the possibility to a more social frame in which learners are able to interact with each other and share knowledge, which stimulates their own communicate competence.
- **Reward and Competition:** Due to the link to the established goals of the game, rewards are an indispensable social element that brings the learner's motivation and competition attitude to light. Thus, I. Rego (2015) states that competition can be easily achieved through providing points or badges to the learners or by creating a ranking where learners can see their own progress.
- **Feedback:** It is assumed that feedback is of utmost importance to progress in learning. Indeed, K. Kapp (2012) argues that its role in learning games "is designed to evoke the correct behaviour, thoughts, or actions" (K. Kapp, 2012: 36). Moreover, feedback can inform the learner about the rate of correct or wrong performances while guiding them to a more appropriate production or comprehension of the item taught (K. Kapp, 2012).
- **Progression in levels:** K. Kapp (2012) divided this element in three objectives. The first one is related to make the thematic of the gamified application progress, which leads to the second objective, that is to reinforce and strengthen the abilities taught and learnt

while new information is presented in parallel. Finally, this application should be challenging for the learners so that they keep engaged while learning.

- **Storytelling:** According to I. Rego (2015), storytelling is relevant since “the name of the game, characters and stages, and some graphic elements are usually sufficient to activate the story that will unfold in the player’s imagination” (I. Rego, 2015: 7). K. Kapp (2012) argues in favour of the importance of storytelling in gamified applications since, in his words, it “provides relevance and meaning to the experience. It provides context for the application of tasks” (K. Kapp, 2012: 41).

Considering the inclusion of MALL applications based on gamification in a didactic environment, W. Huang and D. Soman (2013) focus on the different steps that one must take into account if these educative tools are going to be applied into the second language teaching class. According to these authors, an efficient usage of gamified apps follows five steps:

1. **Understanding the target audience and the context:** The teachers should keep in mind both the knowledge and needs related to their students – such as age or learning skills – and their context, which involves group size, abilities, and environment where the teaching process takes place.
2. **Defining learning objectives:** This step is essential and must be conducted conscientiously since an appropriate delimitation of learning objectives will contribute to a major successful rate in the processes of teaching and learning. Huang and Soman (2013) categorize the potential learning objectives into three types that must be treated under complementary distribution: General instructional goals – which require carrying out different types of tasks, such as assignments or exams –; specific learning goals – which allow learners to comprehend concepts or to fulfil certain tasks after a period of training –, and behavioural goals – which allude to the concentration ability of the learners –.
3. **Structuring the experience:** The teachers ought to consider the different aspects that are going to be covered in the teaching process and how they are going to be sequenced so that learners enjoy from their learning experience without losing their motivations. Thus, Huang and Soman (2013) claim that it is highly recommendable to start by covering the basic notions and advance to more complex tasks on this basis. However, it is likely that boredom or difficulty from lack of knowledge may occur during the learning process. In this sense, Figueroa Flores (2015) suggests that a revision of the

structured teaching program should be made to adapt it to the needs of the learner and avoid threatening their motivation.

4. **Identifying resources:** The question concerning which aspects are going to be taught through games' tasks can only be addressed if teachers have correctly completed the previous steps. In this way, Huang and Soman (2013) enumerate five elements that may help to solve this question: Tracking mechanism, currency, level, rules, and feedback.
5. **Applying gamification elements:** The final step that teachers must conduct involves the decision concerning which elements of gamification are the ones that best fit in their teaching methodology.

All these elements can significantly contribute to the teaching and learning processes because of the positive encouragement that these tools offer. Moreover, carrying out a contrastive analysis of linguistic structures that may be potentially difficult to learn in a second language, such as the uses of the prepositions *para* and *por*, could be a relevant step since teachers may have a wider knowledge about the necessities of their students and how to apply these gamified MALL in their methodologies. Thus, I. De la Cruz Cabanillas (2008) concludes that the processes of teaching and learning would be more efficient if one considers both the results of a contrastive analysis and the causes of the potential areas of difficulty.

5. Prepositions *para* and *por*

Prepositions, according to I. De la Cruz Cabanillas (2008), “seem to be quite idiosyncratic in each language” (I. De la Cruz Cabanillas, 2008: 96). Indeed, this author states that, even though there may be some equivalence in terms of their meaning, mismatches occur frequently. E. González (1998) argues that one of the hardest linguistic structures that non-native learners find in second language teaching environments is the problematic distinction between the prepositions *para* and *por*. A plausible reason that explains this fact is that, according to R. Sidoti (2008), there is a tendency to relate the usage of these prepositions to a single final or causal meaning, which does not cover a complete vision of all its uses in context. In this sense, F. Matte Bon (2010) argues that these prepositions are unable to express meaning on its own but, rather, they are abstract elements that relate to other phrases in the utterance and, thus, its meaning would be conditioned according to the context. This is emphasized if one considers

that these prepositions do not have an exact equivalent in other languages (Dwight L. Bolinger, 1957).⁹

Considering these inconveniences, one can notice the idiosyncratic nature of these prepositions in Spanish, English, and German. Hence, a selection of their main uses will be conducted to specify the required information to carry out a contrastive analysis.

5.1. Description: Uses of *para* and *por*

Prepositions, according to María Moliner (1990), are invariable words which establish a relation, which can differ depending on the preposition used, between two words or larger structures, such as phrases or clauses, one of which expresses a complement of the other (M. Moliner, 1990). G. K. Pullum and R. Huddleston (2017) go beyond and explain that this relation can be established in syntactic and semantic terms. Moreover, I. Bosque explains in his work *Manual de la nueva gramática de la lengua española* (2010) that prepositions are functional words that serve to introduce a syntactic phrase, that is, a complement, that can be fulfilled by Nominal Phrases, Adjectival Phrases, Adverbial Phrases, Prepositional Phrases, Nominal Dependent Clauses, and some relative clauses.

Despite of the fact that I. Bosque's statement can be extrapolated to both, English and German, some authors, such as I. Cabanillas (2008) or S. Lindstromberg (2010), explain that learners may feel confused when dealing with the usage of prepositions due to some differences between the mother tongue and English. Regarding the German prepositions, L. Hoffmann (2013) clarifies that this confusion is experienced by second language learners due to its meaning and the case that a preposition requires. Furthermore, T. Jiménez Juliá and B. Lübke (2013) illustrate that one of the most important factors that one must consider when teaching and learning German as a second language resides in the fact that German prepositions precede mostly nominal phrases, while the Spanish prepositions can precede other phrases.¹⁰ In this

⁹ Dwight L. Bolinger (1957) illustrates his statement with an example comparing the Spanish prepositional paradigm, which consists in nineteen prepositions, and the English one, which is based on 286 prepositions.

¹⁰ In spite of what T. Jiménez Juliá and B. Lübke (2013) state, it is relevant to mention that there is not a clear-cut in this distinction. For instance, the *Digitales Wörterbuch der deutschen Sprache* (2021) considers that *zu* is a preposition that carries out a special grammatical function when it precedes an infinitive. However, the grammatical distinction that T. Jiménez Juliá and B. Lübke (2013) will be respected and considered along the contrastive analysis since both *Duden Wörterbuch* (2021) and *Pons Wörterbuch* (2021) do codify this distinction.

sense, one can perceive that certain uses of the Spanish prepositions are going to be conducted by other elements in German, such as conjunctions.

Due to the numerous uses that these prepositions can denote according to the communicative context, and in order to compile and synthesize the information necessary to carry out a contrastive analysis, a synthetic taxonomy of the main uses of *para* and *por* has been conducted according to the main dictionaries and grammatical works of each language. The purpose of this categorization is to describe the main uses that are recognized by *para* and *por* in order to identify their equivalents in English and German, subsequently. It is important to mention that, according to R. D. Fulk (2008), both English and German are Germanic languages that may share some similarities in their grammar, although English was influenced by non-Germanic languages, such as French or Latin.

Regarding the usage of the Spanish prepositions *para* and *por*, the online version of the twenty-third edition of the *Diccionario de la lengua española* (2021), I. Bosque's *Manual de la nueva gramática de la lengua española* (2010), María Moliner's *Diccionario de uso del español* (2016) and Manuel Seco's *Diccionario de dudas y dificultades de la lengua española* (1986) have been consulted and, according to these works, the following meanings of the preposition *para* have been identified, codified and exemplified in the subsequent table:

PARA		
USES	DESCRIPTION	EXAMPLE
Activity mentally performed*	It introduces an action carried out by an individual mentally.	<i>Por favor, lee para ti y no hagas tanto ruido.</i>
Adjective complement	It alludes to the attitude of an individual towards other individuals.	<i>Debes ser solidario para los más necesitados.</i>
		<i>Juan es lo suficientemente valiente para confesar sus sentimientos a María.</i>
Consequence of a certain cause	It refers to an action that should not be tolerated and, consequently, leads the speaker to do something.	<i>Plagiar es motivo suficiente para suspenderte.</i>
Comparison: Characteristics	It introduces a comparison of two characteristics that represent the same individual.	<i>Para ser una mujer de ochenta años, parece mucho más joven.</i>
Comparison: Quantitative or Qualitative	It introduces a comparison between two quantitative or qualitative features of an individual.	<i>Pedro juega muy bien para ser un principiante.</i>
Condition*	It points out the condition or status of a certain object.	<i>Estos zapatos están para tirarlos.</i>
Considered by**	It alludes to the reflect of an individual about how someone would consider something.	<i>Este desafío no es nada para ti.</i>

Emphasis	It introduces an adverbial phrase that denotes the culmination of a well-known situation.	<i>Para colmo.</i>
Feelings**	It expresses a feeling experienced by an individual in a certain moment.	<i>Para su sorpresa, la actitud de María había cambiado.</i>
Immediate action	It alludes to the disposition of an individual to do an action immediately.	<i>Pedro está preparado para ir a casa de su abuela.</i>
Inconvenience annoyance	or It states the inconvenience of a certain action towards the speaker in the communicative situation.	<i>Lo siento. He tenido un mal día y no estoy para bromas.</i>
Locative	It expresses the place one is going to, as a synonym of <i>hacia</i> .	<i>Voy para Cádiz.</i>
Necessity*	It indicates that an action has not been done yet and it (less frequent than <i>por</i>).	<i>«La casa está [aún] para pintar» (María Moliner, 2016: 1903).</i>
Opinion	It introduces a valuing statement.	<i>Para ser honesto, no creo que eso te beneficie.</i>
Orientation**	It signals the orientation one must follow with motion verbs.	<i>Debes girar para la derecha en esa calle.</i>
Purpose	It denotes the goals or purpose of an action.	<i>Juan fue a correr para despejarse.</i>
	It can indicate the efficiency of certain activities or objects on one's own.	<i>Hacer ejercicios mentales es bueno para la salud.</i>
	It denotes an action that alludes to the intention to do something for someone else.	<i>Estamos recaudando dinero para los más necesitados.</i>
	It introduces skills and abilities that are useful in certain contexts.	<i>Tus habilidades sociales sirven para fomentar un clima participativo en clase.</i>
Receiver	It denotes the beneficiary or the receiver of a certain action.	<i>Este es el libro que he comprado para tu hermano.</i>
		<i>He comprado un libro para ti.</i>
Representations**	It introduces a representative value towards the subject or the object.	<i>María trabaja para UNICEF.</i>
Synonym of buying or giving sth to someone	It can be used in the absence of the verbs <i>to buy</i> or <i>to give</i> , which denotes sufficiency.	<i>Con el dinero que te di debes tener para el pan.</i>
		<i>Estos manuales son para tu hermano.</i>
Temporality	It can express the duration of temporal period time which is required by the action.	<i>Reservaré el libro de María Moliner de la biblioteca para las próximas dos semanas.</i>
	It can denote a specific future time by which an action will be finished.	<i>Habré terminado mi semestre académico para el 26 de junio.</i>
	It can refer to a vague future time by which an action will be finished.	<i>Para el mes que viene habré terminado mi trabajo de Psicolingüística.</i>
	It can introduce a countdown to an event.	<i>Faltan dos semanas para tu décimo cumpleaños, Carlos.</i>

Table 2. Taxonomy of the meanings denoted by *para*.

It is important to emphasize that some of the uses that were codified according to Spanish dictionaries or grammatical works mentioned did not appear in the English nor the German

ones – concretely, those that denote an activity mentally performed, condition, and necessity, which are marked with an asterisk –.¹¹

Conversely, a second revision of the functions of *para* has been conducted according to the entries of the online version of the *Cambridge Dictionary* (2021), *Collins Dictionary* (2021) and *Oxford English Dictionary* (2021); English grammatical works, such as R. Farrell and C. Frederick Farrell's *Side by Side: Spanish & English Grammar* (2012), J. Lawley's *Gramática Contrastiva-Contrastive Grammar* (1999) and S. Lindstromberg's work *English Prepositions Explained* (2010), and the German dictionaries *Digitales Wörterbuch der deutschen Sprache* (2021) – which is abbreviated as DWDS –, *Duden Wörterbuch* (2021), *PONS deutsch-spanisch Wörterbuch* (2021), and the grammatical work from I. Balcik et al., *Die deutsche Grammatik* (2019). This second revision allows an *a posteriori* selection of the meanings that *para* introduces. These meanings are not officially codified in the Spanish lexicographical and grammatical works, but they have been added in this project because they can be conveyed by this Spanish preposition. In this way, the descriptive part of the contrastive analysis proves to enrich the grammars of each language and its relation. Thus, the uses that denotes feelings, orientations, representative value, and a consideration by someone, which are marked with a double asterisk, have been considered and codified in the table, which implies that nineteen different meanings have been detected.

With regard to the Spanish preposition *por*, it is important to highlight its presence in numerous contexts. Indeed, María Moliner (2016) explains that this preposition denotes the meaning of the Latin prepositions *per*, *pro*, and *propter*. Consequently, this is an evidence that proves the invalidity of restricting a preposition to a unique meaning. According to the dictionaries and grammatical works consulted, twenty-five uses have been detected and classified in the following table:¹²

POR		
USES	DESCRIPTION	EXAMPLES
About*	It denotes a similar meaning as <i>concerning</i> or <i>about</i> .	<i>Se han recibido muchísimas quejas por la nueva ley educativa.</i>

¹¹ Significantly, the use of the preposition *para* to state a necessity can be problematic if one notices that this function is more frequently related to the preposition *por*. This proves the complexity of the paradigmatic relation of the Spanish prepositions. Due to the fact that both English and German denote this meaning through a preposition and a conjunction, respectively, and they are more related to *por*, this use is going to be considered within the preposition *por* as a temporal meaning that denotes that an action has not been performed entirely yet, but it will do so in a near future, although María Moliner (2016) states the validity of the preposition *para* in this context.

¹² Some uses have been grouped within other uses to respect the categorization provided by María Moliner (2016).

Agent complement	It introduces the agent complement in passive sentences.	<i>La película fue dirigida por el director Quentin Tarantino.</i>
Causal	It explains the reason or the cause of a certain action.	<i>Juan ha castigado a su hijo por su mal comportamiento.</i>
	It explains the cause why someone is absent.	<i>Pedro ha tenido que irse por motivos de trabajo.</i>
	It explains the reason of a certain feeling or emotion.	<i>Me gustas por tu forma de ser.</i>
	It denotes a similar meaning to the expression <i>with regard to</i> .	<i>Rafael, por su parte, no puso ninguna objeción a la propuesta.</i>
Choice and inclination	It points out the preferences of an individual in decisions.	<i>Yo me decanto por el avión.</i>
Declarative statements**	It introduces a declarative speech act.	<i>Por el poder que me ha sido concedido.</i>
Exchanges and compensations	It introduces an exchange process.	<i>Paco ha cambiado sus gafas viejas por unas nuevas.</i>
	It signals a compensation.	<i>Ojo por ojo, diente por diente.</i>
Concessive value	It introduces a concessive value to the sentence.	<i>Por mucho que jurase que no iría a la calle sin su mascarilla durante la pandemia, él lo hizo.</i>
Contact	It denotes a physical contact with a concrete part of the human body or object.	<i>Ana cogió a su madre por el brazo.</i>
In favour of For the sake of	It expresses a meaning which correspond to <i>in favour of</i> .	<i>Yo voto por la igualdad de género.</i>
	It denotes a meaning related to the expression <i>for the sake of</i> .	<i>Por amor de Dios, te ruego que dejes de gritar.</i>
Locative	It indicates the movement of an individual within a certain area.	<i>Salí a caminar por las calles de mi pueblo.</i>
	It refers to a close distance.	<i>La tienda que buscas está por la zona del ayuntamiento.</i>
	It alludes to a place recently passed.	<i>Vi a María cuando pasé por el parque esta tarde.</i>
	It expresses a path traversed.	<i>Tuvimos que pasar por Dos Hermanas para ir al aeropuerto.</i>
Medium or manner	It refers to how the agent performs an action.	<i>Por mis propios medios.</i>
	It signals the intermediary by which an action has been carried out.	<i>He obtenido el libro que tanto buscaba por su padre.</i>
	It alludes to the channel by which an action is conducted.	<i>He enviado mi trabajo por correo.</i>
	It refers to the procedure by which an action is performed.	<i>Hacer algo por las buenas, redactar por escrito.</i>
Mathematics and proportions	It is used in equations.	<i>Esta ecuación se resuelve si sustituyes la x por 3.</i>
	It is used in divisions and multiplications.	<i>Multiplicar por 3.</i>
	It expresses proportions.	<i>Una porción por persona.</i>
Oaths**	It serves to state an oath.	<i>Juro por Dios que te seré fiel.</i>
Path traversed (figurative)	It denotes that someone is not going through his/her best circumstances.	<i>Juan no está pasando por sus mejores días.</i>

Preceding other prepositions*	It can be used preceding other prepositions.	<i>Por ante notario.</i>
Purpose	It can be used to denote the purpose of an action. * (<i>para</i>)	« <i>Da un rodeo por no pasar por mi casa</i> » (M. Moliner, 2016: 2056).
	It can be used to denote <i>to buy</i> in its absence.	<i>Voy a la panadería a por pan.</i>
	It can be used to express <i>to look for</i> in its absence.	<i>Ir por leña.</i>
	It expresses that the goals of an action are not useful.	« <i>Hablar por hablar</i> » (M. Moliner, 2016: 2056).
Quantitative price	It indicates the exact price of a given product.	<i>Puedes comprar las manzanas por tres euros.</i>
Separation and inclusion	It denotes both the separation of the steps that conform an action and the inclusion of all of them at the same time.	<i>Los policías registraron casa por casa para encontrar al ladrón.</i>
Substitutions, regards and roles	It expresses a situation in which an individual substitute someone else.	<i>He ido a la reunión por mi padre porque él no pudo asistir.</i>
	It denotes a judgemental attitude regarding someone.	<i>Odio que me tomen por tonto.</i>
	It explains the role or the function that someone will perform from a certain moment onwards.	<i>¿Quieres a María por esposa?</i>
Temporality	It points out the number of times that takes someone to do something.	<i>Voy a presentarme al examen de semántica por segunda vez este semestre.</i>
	It expresses an action or an event that has not occurred yet, but it will do so in a near future.	<i>Aún tengo muchos emails por responder. / Lo mejor está por llegar.</i>
	It determines the time for which an action will occur.	<i>Suele tener vacaciones por agosto.</i>
	It refers to a transitional time.	« <i>Por entonces, por ahora</i> » (M. Moliner, 2016: 2056).
	It expresses that a certain action will be finally completed. **	<i>De una vez por todas.</i>

Table 3. Taxonomy of the meanings denoted by *por*.

It is relevant to mention that some uses that this preposition denotes in Spanish are not included in the dictionaries and manuals consulted, but they do appear in English and German dictionaries – concretely, those which serve to express declarative statements, oaths, and the temporal expression *de una vez por todas*. This fact does not only prove that dictionaries do not cover all the meanings that a certain word can denote in a certain context, but that lexicography requires a meticulous and systematic process of selection, description, and exemplification of contextual uses, that can be enriched through the contrastive analysis of different languages. Furthermore, there are meanings that English and German do express through other grammatical elements or through other elements within their prepositional paradigm – such as the meaning that is semantically related to *about* and the introduction of another prepositional phrase –.

Significantly, one of the most important remarks about the usage of the preposition *por* was stated by I. Bosque (2010), who explains that this preposition can be sometimes used to denote the purpose of a given action – in the same way as *para* does so due to a common Iberian-Romance origin. Thus, there are contexts in which *por* can denote both, causality, and purpose, which manifest the validity of *para* and *por* to express the purpose of an action.

5.2.Juxtaposition: Identification and selection of the English and German prepositions

Considering the uses of these prepositions in both English and German, a classification of the prepositions of this language has been carried out as an indispensable second step of the descriptive phase. Due to the fact that the prepositional paradigm of each language presents some similarities and differences with respect to the other languages, one can notice there is not always a direct equivalent for each use, and that each language can make use of various linguistic items to denote the different uses of *para* and *por* in Spanish.

Regarding the case of the Spanish preposition *para*, one can notice a high presence of the English prepositions *to* and *for* and a wider variety of German prepositions and conjunctions according to the case required for each preposition.

PARA			
USES	ENGLISH/ GERMAN PREPOSITION	ENGLISH EXAMPLES	GERMAN EXAMPLES
Activity mentally performed	To/ Für	<i>Please, read to yourself!</i>	<i>Bitte, lies für dich!</i>
Adjective complement	To/ Conj (Zu)	<i>He is old enough to take his own decisions.</i>	<i>Sie ist alt genug, mehr Verantwortung zu übernehmen.</i>
Consequence of a certain cause	To/ Conj (Zu)	<i>Your plagiarism in the latest project is reason enough to fail you.</i>	<i>Deine Note sind der Grund, dir mit summa cum laude bestehen zu lassen.</i>
Comparison: Characteristics	For/ Für	<i>For an octogenarian woman, she looks younger.</i>	<i>Du bist sehr intelligent für dein Alter.</i>
Comparison: Quantitative or Qualitative	For/ Für	<i>Foden plays really well for being a beginner.</i>	<i>Alphonso Davies spielt sehr gut für einen Anfänger.</i>

Condition ¹³	For/ Conj (Um...zu)	<i>They are about ready for the dustbin.</i>	<i>Diese Schuhe sind da, um sie wegzuschmeißen.</i>
Considered by	For/ Für	<i>This challenge is nothing for you.</i>	<i>Das Treffen war sehr angenehm für María.</i>
Emphasis	To/ Zu	<i>To top it all.</i>	<i>Zu allem Unglück.</i>
Feelings	To/ Zu	<i>To my surprise, my cousin had just arrived when I came back home.</i>	<i>Zu seiner Überraschung, bestand er die Chemieklausur.</i>
Immediate actions	To/ Conj (Zu)	<i>He is about to visit his girlfriend.</i>	<i>Er ist im Begriff, seine Eltern zu besuchen.</i>
Inconvenience	For/ Zu	<i>I am not in the mood for jokes.</i>	<i>Ich bin nicht zu Spaß aufgelegt.</i>
Locative	To, for/ Nach	<i>I am going to my grandmother's house.</i> <i>I was amazed because of the amount of people that were heading for the coast this weekend.</i>	<i>Wir fahren morgen nach Cádiz.</i>
Opinion	To/ Conj (Um...zu)	<i>To be honest, I wish I could help you.</i>	<i>Um ehrlich zu sein, ich glaube nicht, dass es nützlich ist.</i>
Orientations	To/ Nach	<i>Peter turned to his right at the end of the street.</i>	<i>Du musst nach rechts gehen, wenn du an den Strand gehen möchtest.</i>
Purpose	To/ Conj (Um...zu)	<i>Pedro took a nap to rest.</i>	<i>Angela braucht ihre Notizen, um Chemie zu lernen.</i>
	For/ Für	<i>Take this pill! It will be a good remedy for your stomach-ache.</i>	<i>Juan braucht ein Medikament für Magenschmerzen.</i>
	For/ Für	<i>We are collecting money for the neediest.</i>	<i>Hilfe für die Bedürftigsten. / Wir brauchen Holz für das Feuer.</i>
	To/ Conj (Zu)	<i>Pablo has an incredible ability to catch up everything we learn in class.</i>	<i>Das ist die perfekte Gelegenheit zu sprechen.</i>
Receiver	For/ Für	<i>I bought these wonderful roses for you.</i>	<i>Ich habe dieses Buch für dich gekauft.</i>
Representations	For/ Für	<i>Gato is the Spanish word for cat.</i>	<i>Thomas Müller spielt für Bayern München.</i>
Synonym of buying or giving sth to someone	For/ Für	<i>You should have enough money for your breakfast.</i>	<i>Ich glaube, dass du genug Geld für das Brot hast.</i>
		<i>These documents are for your brother.</i>	<i>Dieses Wörterbuch ist für deinen Vater.</i>
Temporality	For/ Für*	<i>She has lent me the newest J.K. Rowling's book for the next two weeks.</i>	<i>Kimmich hat eine Wohnung in Cádiz für die erste Woche Juli vermietet.</i>

¹³ It is important to mention that English does not always use the preposition for to denote a condition of an object or individual. For instance, if one considers the expression *para chuparse los dedos* in English, one can realize that this expression is denoted by the colloquial adjective *scrumptious*. Moreover, this meaning is not expressed by a preposition in German, but by the conjunction *um... zu* preceding an infinitive verb, as it is explained in the online version of the *Digitales Wörterbuch der deutschen Sprache* (2021). Therefore, it is important to realize that languages express the same meaning in different ways.

	By / Für, am (auf) ¹⁴	<i>This project should be finished by 4th May.</i>	<i>Der Termin ist für Freitag angesetzt.</i>
			<i>Am Donnerstag wird mein Projekt fertig sein.</i>
	By, for/ Zu, für	<i>By next month I will have finished my project on Psycholinguists.</i>	<i>Ich muss mein Projekt über Kontrastive Linguistik zum nächsten Monat beenden.</i>
		<i>This is the book you must read for March.</i>	<i>Bitte, machen Sie die Hausaufgaben für nächste Woche.</i>
	To/ prep (Bis zu) ¹⁵	<i>It's only four days to Pablo's birthday.</i>	<i>Es sind nur noch vier Tage bis zu ihrem Geburtstag.</i>

Table 4. Taxonomy of the English and German grammar items that denote *para*.

On the other hand, the meanings that the preposition *por* denotes are expressed through different linguistic items in both English and German. Indeed, according to the English and German dictionaries and grammatical works, one can distinguish the usage of various prepositions, adverbs, conjunctions and even adjectives to denote *por* in both languages.

POR			
USES	ENGLISH/ GERMAN PREPOSITION	ENGLISH EXAMPLES	GERMAN EXAMPLES
About ¹⁶	Prep (About, concerning)/ Prep (Über)	<i>We have received many complaints about the new law.</i>	<i>Sie hat viele Beschwerden über das neue Gesetz erhalten.</i>
Agent complement	By/ Durch, von	<i>That film was directed by Quentin Tarantino.</i>	<i>Die Hin- und Rückfahrkarte war durch einen Computer gekauft worden.</i> <i>Das Mädchen ist von dem Vater gerufen worden.</i>
Causal ¹⁷	For, through/ Durch, um, wegen	<i>Juan got injured through not taking enough care of himself.</i>	<i>Sie ist durch das kalte Wetter krank geworden.</i> <i>Sie bemüht sich um ihren Lebenslauf (zu verbessern).</i>
		<i>He could not run for his injury.</i>	<i>Wegen einer Pandemie konnte er sein Erasmus-Jahr nicht machen.</i>
	For/ Aus	<i>I must leave for medical reasons.</i>	<i>Thomas muss aus familiären Gründen gehen.</i>

¹⁴ Despite the fact that this table synthesizes the main uses of *para* in standard English and German, it is interesting to mention that, according to the *Digitales Wörterbuch der deutschen Sprache* (2021), the Swiss dialect uses the preposition *auf* to denote a specific temporal point by which an action will be completed, as *für* and *am* do so.

¹⁵ According to the German dictionaries consulted, German expresses countdowns through the preposition *bis zu* which denotes *hasta* in Spanish.

¹⁶ In spite of the fact that *por* can be used in this context to denote a meaning similar to the preposition *sobre*, it is important to notice that both English and German directly use the equivalent preposition of *sobre* in their language.

¹⁷ A special consideration should be made considering the case of the causal expression *por si acaso*. In English, this expression can be introduced by either the preposition *for* or the adverb *just*, while German uses the adverb *vorsichtshalber*.

		<i>I love you for being such a wonderful person.</i>	Danke (ihnen) für ihre Aufmerksamkeit.
	For, by/ Für, um	<i>I am surprised by your academical progress.</i>	Klaus hat sich um dich gesorgt.
	For/ Von	<i>For my part, I agree with your statement about glass ceiling.</i>	Das war ein Fehler von ihm.
Choice and inclinations	For/ Für	<i>He opted for travelling by plain.</i>	Er entscheidet sich für den Zug.
Declarative statements	By/ Durch	<i>By the power invested in me.</i>	Durch die Kraft des mir verliehenen Amtes.
Exchanges, compensations	For/ Für	<i>Paul has changed his book for the latest Chomsky's book.</i>	Toni Kroos hat seine alte Brille für eine neue ausgetauscht.
	For/ Um	<i>An eye for an eye.</i>	Auge um Auge.
Concessive value	For/ Trotz	<i>For all he studied, he did not pass his driving-license test.</i>	Trotz der Komplikationen werde ich es schaffen.
Contact	By/ Bei	<i>I took her by her hand.</i>	Sie berührt die Tasse beim Henkel.
In favour of For the sake of	For/ Für, um...willen	<i>I voted for improving the migrant conditions in the USA.</i>	Ich bin für die Gleichberechtigung.
		<i>For the sake of God.</i>	Um Gottes willen!
Locative			Süle geht durch die Straße ihrer Stadt.
	Through/ Durch, über	<i>He walked through the streets.</i>	Die Familie fährt über Dos Hermanas nach Sevilla.
	By/ Bei	<i>The restaurant you are looking for is by the bank Santander.</i>	Jédula liegt bei Arcos de la Frontera.
	By/ An	<i>I saw my friend Laura when I passed by the school we used to assist.</i>	Neuer sah seinen Freund Robert als er am Stadion vorbeigekommen ist.
Medium manner or	Through/ Durch	<i>Paul walked through the woods and he found a lake.</i>	Er ging durch die Tür.
	By/ Für	<i>I wrote this by myself.</i>	Pablo kocht für sich.
	Through/ Durch	<i>He got his book through a friend who works in the main library.</i>	Ich habe euch durch meinen Bruder kennen gelernt.
	Through/ Per	<i>He got them to learn the difference between transitive and intransitive verbs through examples.</i>	Er hat ein Paket per Post geschickt.
Mathematics and proportions	By (also in)/ Prep (In), adjective	<i>By fair means, by hand (also in writing).</i>	Etwas im Guten machen/ schriftlich.
	For/ Durch	<i>This operation can be solved if you substitute the value of y for 5.</i>	Du muss x durch 8 ersetzen.
	By/ Mit, durch		Mit sieben multiplizieren.
		<i>Multiply or divide by three.</i>	Durch sechs teilen.
	For, to/ Für, pro	<i>You will get ten points for each correct answer.</i>	Du wirst zehn Punkte für jede richtige Antwort bekommen.
		<i>Rafael and Javier participated in the last running competition and Rafael ran five kilometres to Javier's ten kilometres.</i>	Es bleibt genügend Zeit, um eine Frage pro Person zu stellen.

Oaths	By/ Bei	<i>By almighty God.</i>	<i>Ich schwöre es bei meiner Mutter. / Bei Gott.</i>
Path traversed (figurative)	Through/ Durch (verbo durchleben)	<i>Pablo is going through a bad month.</i>	<i>Er durchlebt eine Krise.</i>
Preceding other prepositions	Adverbs	<i>Behind.</i>	<i>Hinter.</i>
Purpose	For/ Für, um... willen, conj (zu)	<i>He asked Mary to go out for being accompanied yesterday.</i>	<i>Endlich erzielen sie Einigkeit für die Familie. /Um der Familie willen.</i>
	For/ Für	<i>I am going for a carton of milk.</i>	<i>Er bemüht sich, seine Klausuren zu bestehen.</i>
	For/ Für	<i>I am going for firewood.</i>	<i>Ich gehe für Brot.</i>
	For/ Verb (Quasseln)	<i>To talk for the sake of talking.</i>	<i>Ich gucke für Brennholz.</i>
Quantitative Price	For/ Für, um	<i>You can have these oranges for six euros.</i>	<i>Quasseln.</i>
			<i>Joshua hat ein neues Buch für vierzehn Euro gekauft.</i>
Separation and inclusion	To / Für	<i>They searched house-to-house to find the thief.</i>	<i>Ich habe diesen Apfel um vier Euro verkauft.</i>
Substitutions, regards and roles	For/ Für	<i>I will take those bags for you.</i>	<i>Haus für Haus oder Punkt für Punkt.</i>
	For/ Für	<i>He took his friendship with Ann for granted.</i>	<i>Alex spricht für die ganze Gruppenmitglieder.</i>
	To/ Conj (Als)	<i>Do you want Mario to be your husband?</i>	<i>Luis mag es nicht, dass sie ihn für dumm halten.</i>
Temporality	For/ Zu	<i>I am going to take the drive-license test for a second time.</i>	<i>Willst du Klea als deine Frau nehmen?</i>
	To/ Conj (Zu)	<i>There are still a lot of emails to be replied.</i>	<i>Klaus macht seine Linguistik Klausur zum dritten Mal dieses Jahr.</i>
	For/ Prep (In)	<i>He will come for Christmas.</i>	<i>Es gibt noch viele E-Mails zu beantworten.</i>
	For/ Für	<i>For now.</i>	<i>Er hat Urlaub im Juli.</i>
	For/ Für	<i>Once for all.</i>	<i>Für jetzt.</i>
			<i>Ein für alle Mal.</i>

Table 5. Taxonomy of the English and German grammar items that denote *por*.

Considering these uses, one can realise about some remarks that are going to be essential for the comparison. While both Spanish and English make use of the prepositions *por* and *for* respectively to denote an action whose purpose is not really useful, as in *hablar por hablar* – *to talk for the sake of talking*, the German language expresses this meaning through verbs – , *quasslen* or *babbeln* –. A similar case occurs when the preposition *por* introduces the way an action is conducted, as in *por escrito* or *por las buenas*. While the English language allows the construction of this expression through the preposition *by* – *by hand* or *by fair means*, the German preposition that is used to state this kind of utterance is *in* – *etwas im Guten machen* – which is sometimes another alternative to express this meaning in English – *in writing* –.

Another important remark should be indicated regarding the connotation of role since German does not use a preposition but a conjunction to express it. Finally, it is relevant to highlight that neither English nor German make use of these prepositions to introduce another preposition since it directly employs an adverb: *behind*, or *hinter* (*por detrás de*).

5.3. Comparison: Analysing the similarities and differences of the Spanish, English and German prepositional uses of *para* and *por*

The complexity of the prepositional paradigm in both an intralingual and an interlingual level requires a broad and comprehensive analysis of similarities and differences that may occur during the second language teaching and learning processes. During the previous phases, some remarks and considerations have been anticipated to provide a coherent source of knowledge that is going to be of utmost importance to derive conclusions.

Concerning the case of *para* and *por* in an intralingual level, the clearest evidence that one can realize is that Spanish does only employ one preposition to denote various meanings that can even connote different semantic hints depending on the communicative context – for instance, the expression of temporal meaning –. Moreover, one must remind that, in spite of the apparent simplicity of the duality cause-purpose, *por* can denote the objective of an action, which is commonly expressed by the preposition *para*, due to etymological reasons, as I. Bosque (2010) explained. In this way, the descriptive phase of this contrastive analysis does not only serve to illustrate and provide the essential background information about the linguistic items that conform the target of study, but it also demonstrates and supports what R. Sidoti (2008) states concerning the invalidity of restricting these prepositions to the dichotomy cause-purpose. Consequently, it would be essential to introduce the uses of these prepositions to the learners in their first language to clarify the possible doubts or questions that they may have and, in this way, to overcome a possible area of difficulty in the teaching and learning processes.

Significantly, the contrastive analysis of the main uses of *para* between Spanish and English prepositions offers some considerations that are of utmost importance to reflect on. Firstly, it is relevant to indicate that, whereas Spanish does only use the preposition *para* to express nineteen different meanings, the English prepositional paradigm includes three different prepositions to express these meanings, which are the following ones: *by*, *for*, and *to*. This is precisely a potential area of difficulty, as Spanish native speakers must learn how to differentiate between

different prepositions and the meanings they express depending to the complement they precede.

Moreover, one can notice that, while *by* is only used in specific temporal contexts that express the date by which an action will be finished in either a concrete or a vague manner, the prepositions *for* and *to* present a hegemonic position within this paradigm, as they are the ones more used to denote the same meanings as *para* – they both present a 49% of presence in the uses stated, even converging on certain uses–.

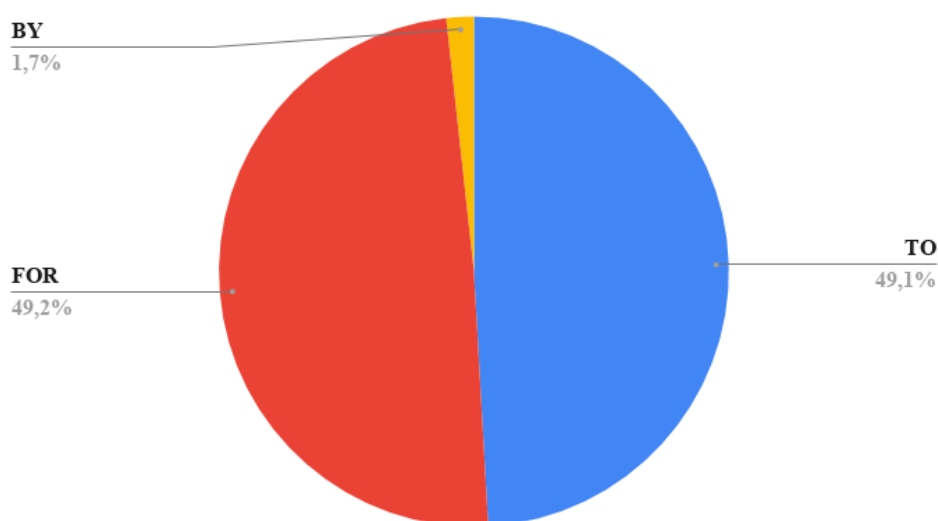


Figure 1. Percentage of English prepositions according to the number of meaning they express in communicative exchanges.

One of the most important remarks that one must reflect on the teaching of these prepositions is that, whereas some meanings can only be expressed by a single English preposition – *for* and *to*, for instance, can denote eight different meanings respectively –, there are cases in which two or even all these prepositions can converge, denoting different semantic hints depending on the communicative context – such as temporality, locative, and purpose –. Indeed, this last remark confirms what both F. Matte Bon (2010) and Dwight L. Bolinger (1957) explained concerning the prepositional paradigm and the obstacles that they perceived in the second language teaching and learning field. Thus, learners should be able to learn these prepositions through social interaction in communicative situations to overcome a possible area of difficulty that may arise from distinguishing these three prepositions.

Furthermore, it is relevant to highlight the fact that the dichotomy causality-purpose is also unsustainable in English. In spite of the fact that *for* can express causality and *to* denotes purpose, *for* can also convey a meaning related to the objectives of certain actions, in a similar way as the Spanish prepositions *para* and *por*. This similarity implies that the ancient methodology that was based on distinguishing these prepositions through restricting them on a simplistic difference of cause-purpose is erroneous, and that a correct methodology should consider all the hints that a preposition can convey in the communicative contexts.

Concerning the contrastive analysis of the preposition *por* in Spanish and English, it is relevant to state that the Spanish preposition can express twenty-five different uses depending on the complement it precedes. In this sense, the 92% of these uses are expressed by an English preposition that is semantically related to *por*, whereas the remaining 8% of these uses are conveyed by either other prepositions that are more related to the Spanish preposition *sobre* or adverbs.

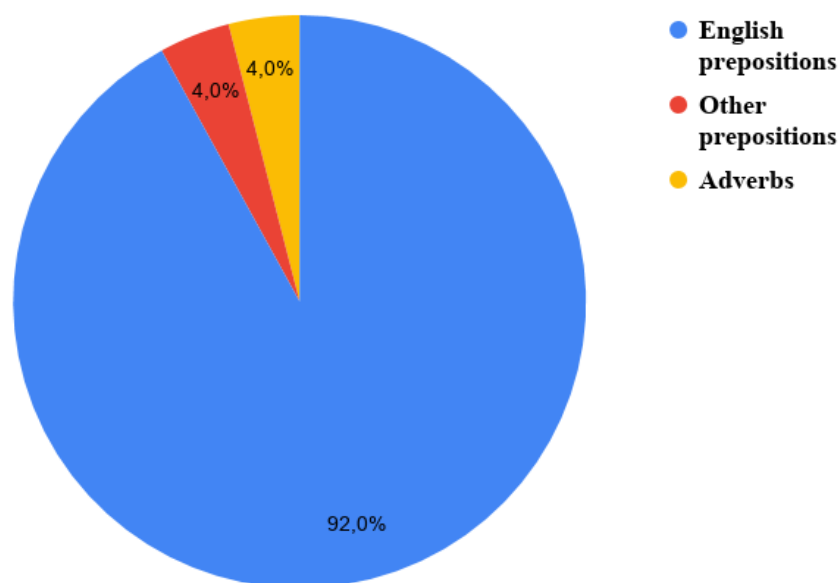


Figure 2. Percentage of English grammar elements that denote *por*.

The prepositions that correspond to this 92% of the uses are: *by*, *for*, *through* and *to*. In this way, and according to the statistics that this second figure provides, twenty-three out of the twenty-five uses detected are expressed by English prepositions that are semantically related to the Spanish preposition *por*. However, it is of utmost importance to signal that, in the same way as it occurred in *para*, although there are cases in which a direct relation preposition-meaning exists – such as the preposition *by* that indicates an agent complement in passive constructions –, there are other cases in which two or more prepositions can converge to express a certain

function with a hint in their meaning. Furthermore, there are cases in which the English grammar does not employ any of these four prepositions but, rather, it uses other prepositions that are semantically more related to the meaning expressed or adverbs. Thus, the lack of the indispensable knowledge, both theoretical and practical, concerning the uses of the English prepositions may become a potential area of difficulty for learners who will have to face the problematic of determining which preposition they should employ in a communicative exchange.

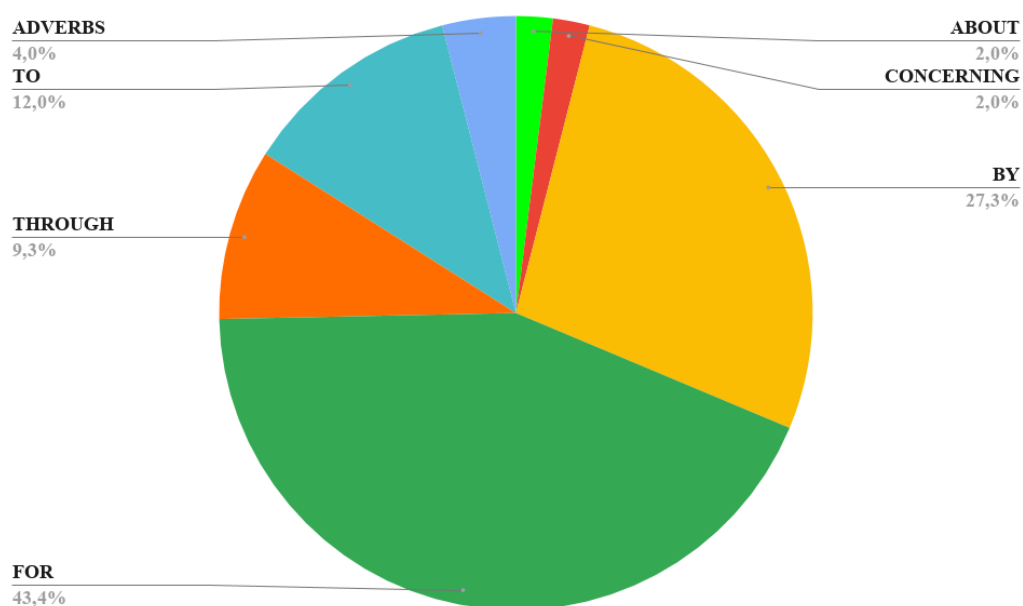


Figure 3. Percentage of English grammar items according to the number of meanings they express in communicative situations.

Besides, it is relevant to mention that the most frequent English preposition which expresses the meanings that *por* introduces when related to a complement is *for* – 43,4% of the uses detected –, which is followed by the preposition *by* – 27,3% –. Despite their high percentage with regard to the other prepositions and adverbs, it is important to emphasize the fact that these prepositions do not convey all the meanings that have been identified, but some of them. For instance, *for* can be used to denote a causal meaning, but it cannot express the manner or means by which an action is conducted. Moreover, one must keep in mind that *by*, *for*, and *to* are also used to denote meanings of *para* and, consequently, this can provoke confusion in Spanish learners of English as second language if they do not assimilate the different connotations that these prepositions may have. In this sense, it is relevant to mention that one should not take for granted the usage of the different English prepositions. The fact that a certain preposition presents a higher percentage of use does not imply that it is the appropriate one to convey a

certain meaning in certain contexts, which may lead and cause avoidable misinterpretations or incomprehensible messages.

A similar case occurs concerning the usage of other English prepositions and adverbs. Significantly, their percentage of use are the lowest in terms of the connotation of *por* in Spanish (only 4% of the cases). However, their presence must not be forgotten since, whereas the Romance language can use *por* to express both a semantic meaning closely associated to the preposition *sobre* and to introduce another preposition, English cannot use the previous prepositions to express them. Thus, a methodology that serves to overcome potential areas of difficulty should consider these cases and to illustrate them so that learners can receive a wide and complete informative knowledge that they can apply in their communicative exchanges.

With regard to the German language, one can notice that the problematic distinction between *para/ por* it is relevant to notice that not only prepositions are used to express the meanings that *para* denotes when it is related to a complement, even though they are the most frequent ones – as it occurs in the case of the English prepositions that express *por* when they are related to a complement –. In fact, one can perceive that conjunctions and other prepositions can denote some of these uses.

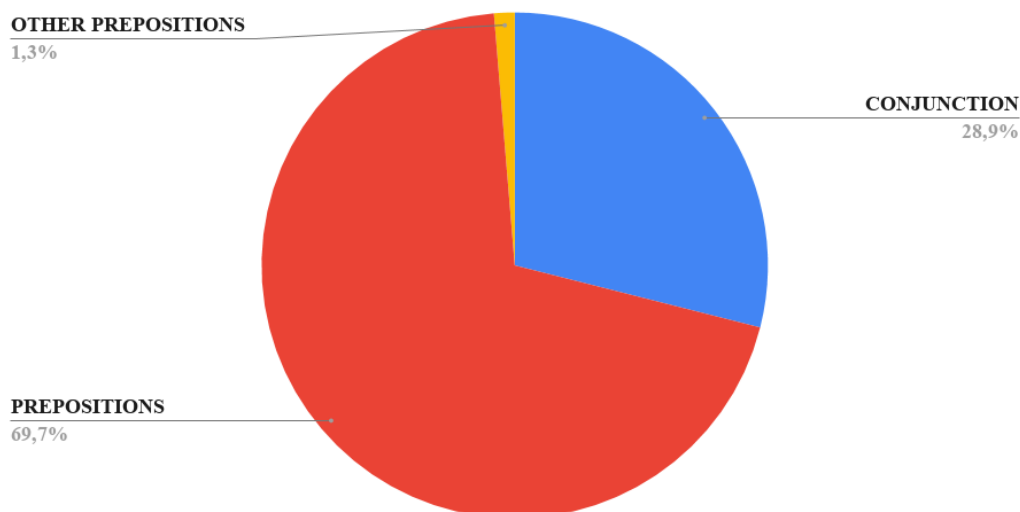


Figure 4. Percentage of German grammatical elements that denote *para*.

According to the fourth figure, almost the 70% of the meanings that *para* expresses are conveyed by German prepositions. These prepositions are *am*, *für*, *nach* and *zu*. Surprisingly, the remaining 30% of the uses detected are expressed through either the conjunctions *zu* and *um ... zu* that precede an infinitive verb and that introduce a dependent non-finite clause – 28,9% –, or through the preposition *bis zu* that is semantically related to the Spanish preposition

sobre – 1,3% – . Hence, learners must consider that there is not always an exact equivalent to express a certain meaning in the second language taught and that, due to the idiosyncratic features of each grammar, these meanings can be introduced by other linguistic items that may not always belong to the same paradigm.

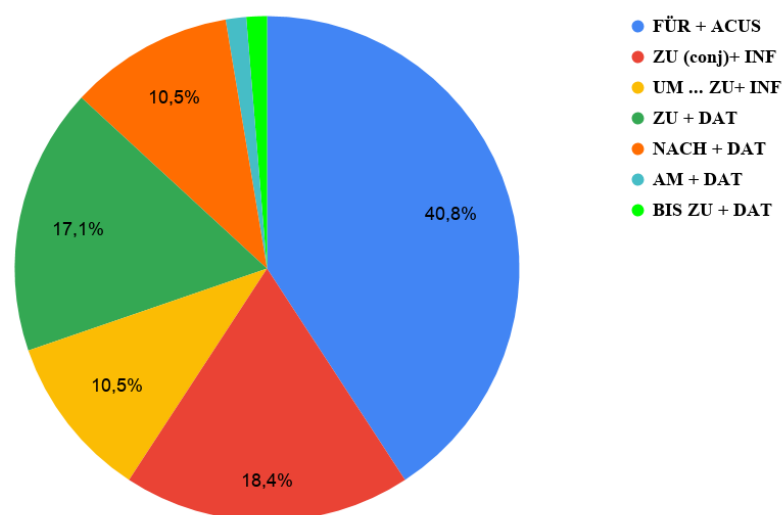


Figure 5. Percentage of German grammatical elements according to the meanings they express in communicative situations.

Significantly, one can perceive some similarities between English and German. As the fifth figure indicates, the prepositions *für* and *zu* cover almost the 58% of the nineteen uses of *para*, which they even coincide with other German prepositions in certain uses – such as the preposition *am* to express temporality –, as it happened in English. Moreover, it is relevant to note that, in some cases, the usage of these prepositions coincides with *for* and *to* respectively, which may lead to an indispensable reflection concerning the etymology of these prepositions. As the *Oxford English Dictionary* and the *Digitales Wörterbuch der deutschen Sprache* (2021) indicate, these prepositions may share an etymological origin that gave rise to both the Old English *tó* and *for* and the Old High German *zuo*, *za*, *zi* and *furi*. Thus, apart from the influences that led them to evolve independently, as R. D. Fulk (2008) explains, the fact that they share the same origin can be a plausible reason that explains this similar juxtaposition in terms of the meaning they connote when they are related to their complements.

In spite of the possible similarities between the Germanic languages, the uses of five prepositions – including *bis zu*, although it does not mean exactly *para* – and two conjunctions can be problematic for Spanish learners of German as second language, specially if one considers that the prepositions of this romance language do not require the declination of the

nominal phrases they precede. Therefore, this is an essential factor that must be regarded in the second language teaching field since a methodology that merely consists in illustrating which German prepositions are used to denote *para*, without mentioning the cases that each preposition requires, lacks from theoretical and practical bases.

Regarding the cases of the German conjunctions, there is a terminological difference between these languages since Spanish authors – such as María Moliner (2016) or I. Bosque (2010) – consider that the preposition *para* introduces an infinitive verb to express the purpose or the objective of certain actions. However, the German dictionaries *Duden Wörterbuch* (2021) and *Pons Wörterbuch* (2021) consider that infinitive verbs are introduced by the conjunction *zu* instead of a preposition. This point reinforces T. Jiménez Juliá and B. Lübcke’s statement (2013) since it does not only prove that German prepositions require a nominal phrase declined in a certain case – either accusative, dative, or genitive –, but it also signals that the German prepositional system is more restricted than the Spanish’s one in terms of its usage. Nevertheless, it is relevant to mention that the *Digitales Wörterbuch der deutschen Sprache* (2021) does consider the preposition *zu* preceding an infinitive verb as a special use of this preposition. In fact, this dictionary does not have an entry of this word as a conjunction. Thus, it is important to notice that there is not an exact consensus in how to consider the usage of this word in an intralingual level.

Another important factor that differs from the Spanish usage of *para* is its syntax, concretely in the case of the conjunction *um ... zu*. Despite their flexibility in terms of the position in which they can appear in a certain sentence, one could perceive that the Spanish preposition always precedes the infinitive verb directly – although this infinitive verb may possess a pronoun attached as a suffix –, while the German conjunction requires the construction ‘um + nominal/adjectival phrase + zu + infinitive verb’. This contrast is illustrated by the following examples:

CONDITION	Los zapatos están para <u>tirarlos</u>
	Prep + infinitive verb
	<i>Diese Schuhe sind da, um <u>sie weg</u>/<u>zu</u>/<u>schmeißen</u>.</i>
	um+ NP+ zu+ infinitive verb (compound)
OPINION	Para <u>ser</u> sincero, no creo que eso sea útil.
	Prep+ infinitive verb
	<i>Um <u>ehrlich</u> zu <u>sein</u>, ich glaube nicht, dass es nützlich ist.</i>
	Prep+ AdjP+zu+infinitive verb

Remarkably, one can notice that *zu* can be attached to the root of the infinitive verb – as in *wegzuschmeißen* – by a derivational process that consists in creating compounds. Due to the fact that this structure would be ungrammatical within the perspective of the Spanish grammar, the expression of certain uses that involve the usage of the conjunction *um...zu* could become a potential area of difficulty for Spanish second language learners of German.

Finally, the case of the preposition *por* in German seems to be the most complex as it presents several issues that one must reflect on diligently. Regarding the twenty-five uses detected for the Spanish preposition, the 80% of these uses are fulfilled by either one or several prepositions that vary depending on the communicative context.

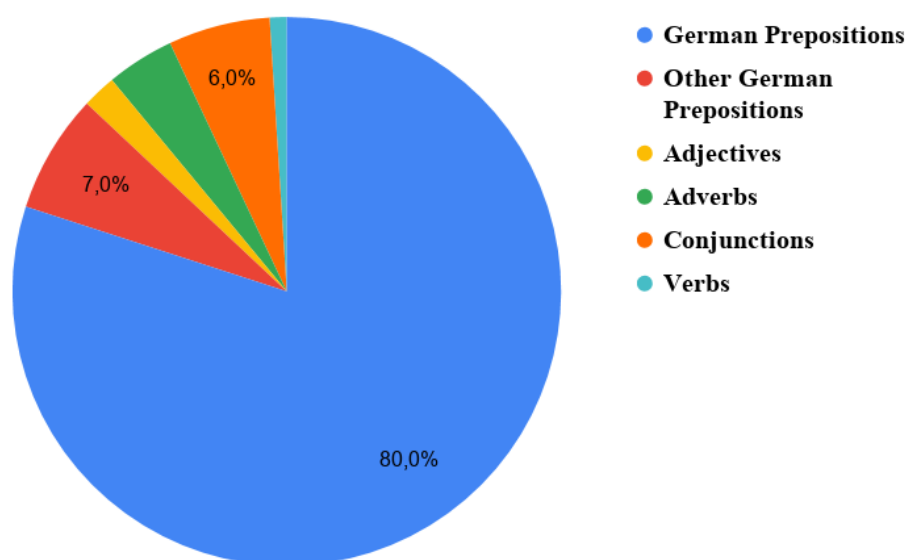


Figure 6. Percentage of German Grammar items to denote *por*.

As it can be perceived by the sixth figure, the simplicity of the Spanish grammar, which uses a unique preposition to connote various meanings according to the communicative contexts, is inviable in German, which employs sixteen prepositions: *an, aus, bei, durch, für, in, mit, per, pro, trotz, um, um ... willen, über* – in its locative acceptation –, *von, wegen, and zu*. Furthermore, the remaining 20% corresponds to adverbs – *hinter* –, adjectives – *schriftlich* –, conjunctions – *als* and *zu* – verbs – *quasseln* – or other prepositions that can express some meanings that *por* does, although they are not semantically related to *por* but to another Spanish preposition. Thus, some possible areas of difficulty for learners of German as a second language reside in the amount of linguistic elements that can connote the uses of the Spanish preposition in communicative situations and in the case that they should decline the subsequent nominal phrase when using a preposition. Besides, the unawareness of the numerous uses that a certain preposition can fulfil is an obstacle that learners must overcome since, in some contexts, it has

been pointed out that various prepositions can even coincide within a specific function with a certain variation in their meaning. Thus, a methodology that integrates both a complete theoretical source of information and a praxis of this knowledge in communicative contexts can help the students to improve both, their linguistic and the communicative competences.

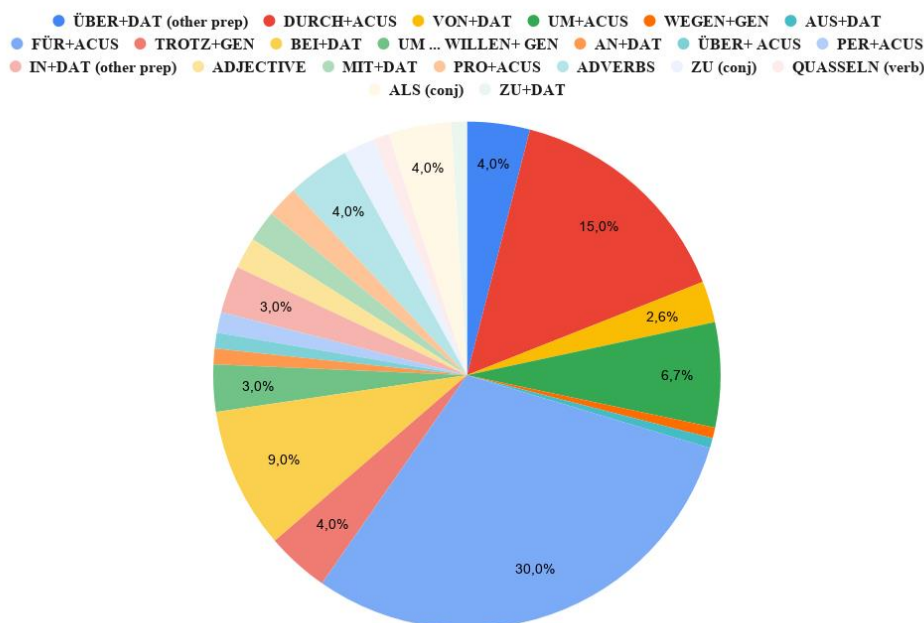


Figure 7. Percentage of German grammatical elements according to their meanings in communicative contexts.

In a similar way as it occurs with the English preposition *for*, the German preposition that covers more meanings through introducing a complement is *für*, although its percentage is lower than the English one – 30% against the 43,4% of the meanings covered by *for* –. This fact can be explained considering the numerous grammatical elements that the German language employs to denote the meanings that *por* conveys within a prepositional phrase. A similar case happens with the prepositions *bei* and *durch*, which share an etymological origin with the English preposition *by* and *through*, respectively, as the *Oxford English Dictionary* (2021) and the *Duden Wörterbuch* (2021) indicate. Remarkably, the case of *bei/ by* presents that the percentage of use of the German preposition is also lower than the English one – 9% against the 27,3% of the meanings expressed by the English preposition –. However, the comparison of the prepositions *durch/ through* illustrates that the German preposition possesses a higher percentage of use – 15% against the 9,3% of the meanings conveyed by the English preposition *through* –.

Furthermore, it is important to perceive that German also employs conjunctions and other prepositions to denote some functions attributed to *por*, as it happens when conveying some of the uses of *para* in this language. It also uses adverbs rather than prepositions to introduce another prepositional phrase, as it occurred in English. Finally, some cases that differ from English and Spanish are the fact that, sometimes, the manner in which an action is conducted can be carried out through adjectives – *por escrito/ schriftlich* –, and that it employs a verb to denote that the purpose of an action is not useful – as the verb *quasseln* to express *hablar por hablar*.

Significantly, one can notice that English and German may share more similarities than with respect to the Spanish language. The fact that these languages make use of different prepositions to denote the same meanings that a unique preposition does in the Romance language is, perhaps one of the major difficulties that teachers must keep in mind when reflecting on the methodology they will apply in their second language classes. Apart from this fact, the problem concerning the cases that German prepositions require and the existence of the different linguistic elements that both Germanic languages use to express some of the meanings that *para* and *por* do within a prepositional phrase, and the interlinguistic difference with regard to the Spanish and German syntax are other potential areas of difficulty that both teachers and learners may encounter during the teaching and learning processes.

Therefore, as it has been pointed out along this comparative phase, a methodology that can solve these difficulties and to strengthen the learners' competences required through the CEFR (2020) should be based on the theoretical explanation concerning how these prepositions work in both the first language and the second language and their applied use in contexts that require the active participation of the learners. In this way, the gamified M-Learning application *Duolingo* is going to be presented as a plausible technological tool that can complement the processes of second language teaching and learning in a virtual environment and encourage the attitude, motivation, and competences of the learners.

6. Analysis of the gamified M-Learning application *Duolingo*

The fervent demand of new technological advances that satisfy the arrival of learner's educative needs has germinated the incoming of different gamified mobile learning applications. In this sense, the application *Duolingo* is a well-known educative tool that counts with more than 300 million users worldwide (Duolingo, 2020). This application, which was

founded by Luis von Ahn and Severin Hacker, is based on a methodology that is centred on the implicit learning – that is, the acquisition of linguistic structures in an unconscious way through short, gamified lessons –, and the explicit teaching of grammatical rules, pronunciation, and vocabulary (Duolingo, 2020). In this way, Duolingo stimulates the use of language in all its competences through activities that simulate real communicative exchanges while learners can assimilate grammatical aspects and vocabulary of the language taught (Duolingo, 2020).¹⁸

Considering the elements that make this application up, it is relevant to highlight that *Duolingo* makes use of all the gamified elements that I. Rego (2015) described. Indeed, the goals of each user are established when one uses this application for the first time so that each user can learn a language through a personalized study program that is based on a progression in levels. In other words, *Duolingo* is based on modules that consist in various contents. These contents, in turn, consist in five lessons whose activities increase its difficulty as the they are accomplished to avoid the loss of motivation. Moreover, its aesthetic is designed to provide an organized overview of the contents of each module.

With regard to the game thinking, this element is closely related to the feedback that the own algorithm provides the learners, the collaboration of the students in forums, events and other activities and, also, the rewards that they will receive once they accomplish each lesson satisfactorily. *Duolingo* also possesses other elements, such as badges and a board in which each student occupies a position according to the points they receive, which encourage a competitive feeling that serves to motivate the learners to keep improving their competences. Nonetheless, the only element that *Duolingo* seems to lack is storytelling, although it possesses an owl as the main character and other secondary characters that appear during the activities, and stages that are represented by the different modules.

Furthermore, learners are allowed to both take a test to prove that they have already learnt certain contents of a module and, consequently, to advance to the following content, or repeat the lessons as many times as they want to potentiate the possible difficulties that they may encounter during the learning process. In this way, the digital competence of the learners plays an essential role, since they are the main actors of their learning within the autodidactic atmosphere that this digital platform offers.

¹⁸ It is important to mention that the subsequent figures illustrate the usage of *Duolingo* and they have been extracted from the application itself.



Figure 8. Example of some gamified elements of *Duolingo*.

Concerning the activities that constitute each lesson, they are mostly based on translation – from the first language to the target language and vice versa –, selecting pairs of words, multiple choice exercises in which learners prove that they have learnt the cases, gender, vocabulary of a certain issue, pronunciation activities, among others.

In spite of the criticisms that relate this app to the Grammar-Translation method, I. Garcia (2013) claims that this digital platform is valid and efficient enough to potentiate the learner's learning process and, consequently, the competences that the CEFR (2020) summarizes among the digital competence. Moreover, the own website of this application enumerates several publications that intend to both promote the benefits and the functioning of the current algorithms and systems that underlie this application, and to explore new ways to improve the application and, thus, to feed back its own algorithm so that the incoming intellectual necessities of the learners can be satisfied within the second language teaching and learning field.

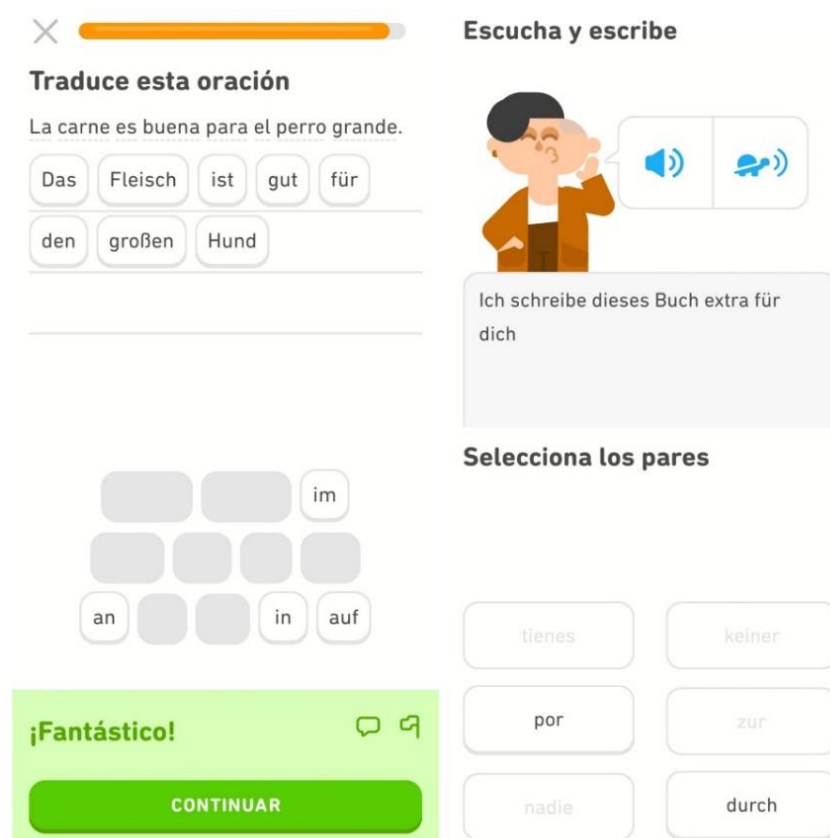


Figure 9. Examples of some exercises that *Duolingo* provides.

Regarding the activities that one can see in the ninth figure, one can perceive that *Duolingo* offers the possibility to learn patterns and sentences that one can use in real life conversations. Nevertheless, it sometimes makes use of literal translations in either the statement or in the feedback it provides to the learners, which may lead to certain confusions when a correct answer is provided but it does not coincide with the answer generated by its algorithm.¹⁹ In this sense, a possible alternative that may solve this inconvenience and that it can be done within *Duolingo* is to create a forum in which students can consult their doubts to their teachers and interact to other students. In this way, learners can receive feedback from different sources: the own algorithm of *Duolingo*, teachers, and even from other learners involved in the learning process.

Regarding the teaching and learning processes of the prepositions *para* and *por*, it is important to mention that this application includes the explanation and practice of all prepositions in a specific content *prepositions*, instead of providing various sections of the different prepositions that exist in each language according to the meaning they connote.

¹⁹ For instance, the German preposition *durch* is related to the Spanish preposition *por* in terms of the meaning *path traversed*, among others. However, this meaning can be also expressed in Spanish by the adverbial phrase *a través de*.

Despite the apparent inconveniences that they may provoke, one must keep in mind that a given preposition can denote different meanings depending on the contexts and that a complete scope of the functions of each preposition can help to comprehend the similarities and differences that exist between them and how they operate in the grammatical structures of each language. Therefore, the inclusion of all prepositions in a certain context could encourage learners to assimilate similarities and differences between the first language and the second language at the same time they are allowed to practice the usage of the prepositions – including *para* and *por* – in the target language in terms of its comprehension and production.

Another possible inconvenience can be related to the fact that *Duolingo* produces sentences that are not contextualized and, sometimes, they denote a meaning that does not correspond to the reality. This fact may provoke a negative reaction as this application may be considered as useless if one is not allowed to learn anything in a real context. However, it is precisely its methodology based on translation what serves to compensate for the lack of context since learners are constantly practicing their abilities in their second language through the influence of the first language. Thus, they are not only able to discern patterns of linguistic structures, but also their meaning when they receive a positive feedback that, sometimes, is accompanied by a translation of the meaning in their first language. Moreover, *Duolingo* has incorporated the function *stories*, which consists in the narration of a story through dialogues between characters and learners must answer questions related to it. The questions generated in this function involves multiple choices, pairing words, selecting the correct word, or writing a sentence correctly while a story is narrated.²⁰ In this case, both the activities and the use of the linguistic item that one is studying are contextualized by the dialogue of the characters. Therefore, one can notice that *Duolingo* is a gamified mobile learning application that seeks to improve itself to guarantee a complete teaching and learning experience from which learners can enjoy.

²⁰ This function seems to be only available if one is training English as a second language for Spanish native speakers, although it is possible to access to other stories in other languages, such as German, if one selects the option of English as a first language.



Figure 10. Example of the function stories in *Duolingo*

The motivation and the autonomy that technological advances provoke on the learners are of relevant when dealing with the second language teaching and learning field. The competitive attitude that learners develop through the gamified elements signalled is precisely what cause their attitude to improve and overcome the obstacles. In this sense, *Duolingo* is an example of a mobile learning application that serves to reach and reinforce, at least, a B1 level of competence in the second language trained, as G. García Botero (2018) explains. This fact is of utmost importance, among the steps that W. Huang and D. Soman (2013) indicate, to compose a proposal for the inclusion of *Duolingo* as an educative tool that can complement and reinforce the theory and praxis of the usage of the prepositions, focusing on the similarities and differences of the prepositions *para* and *por*, in the second language classroom.

6.1. A Proposal for the usage of *Duolingo* in the field of Second Language Teaching

Once analysed the principal similarities and differences of the usage of *para/ por*, the potential areas of difficulty that Spanish native learners may face in their learning process, and the functioning of *Duolingo* and its possible benefits may provoke in it, a methodology that implement *Duolingo* as a complement educative source in the second language teaching field will be proposed.

Nevertheless, a previous consideration regarding the procedure that W. Huang and D. Soman (2013) indicate for the appropriate elaboration of a methodology with M-Learning applications must be done. Firstly, one must keep in mind the idiosyncratic features of each learner. On this basis, it is necessary to understand that, even though this methodology requires a previous linguistic and communicative knowledge on the second language, it can be modified to be adapted to the needs of the students. Thus, this methodology will consist in different tasks that encourage both the autonomy and the cooperative awareness of the students. These activities will be planned coherently, following a progression that will increase their difficulty once they are accomplished – initial, developing and closing tasks –, as J. Pimienta Prieto (2011) indicates.

Subsequently, the learning objectives must be adjusted to the linguistic level that the students should accomplish according to the CEFR (2020) states and to their prior experience with the second language. Once the goals are specified, the structure of the experience should cover from the basic descriptions of the uses of the prepositions in the second language to its praxis in communicative situations. Nevertheless, this methodology must be flexible enough to carry out modifications in case that there would be evidences that may threaten the learners' loss of motivation. Finally, the gamified mobile learning application will be employed in the teaching methodology among other tasks that are geared to achieve the objectives proposed.

In this way, the present teaching methodology will describe the goals, materials, space, procedure, and the results that each stage is intended to pursue. It is important to consider that, due to the fact that this didactic methodology intends to be applied to any second language teaching environment, both languages English and German will be considered in order to simplify the information. Some examples of the activities proposed can be found in the annexes of this project.

TITLE	The usage of the prepositions <i>para/por</i> in English/ German
AUTOR	Luis Pérez Serrano
LEVEL	B1-B2
RECEIVER	Spanish teenagers-adults
DURATION	Five Sessions – 90 min each session
GOALS	<ul style="list-style-type: none"> - To develop a basic knowledge of the usage of the prepositions <i>para/por</i> in both, an intralingual and interlingual level. - To consolidate their knowledge concerning which kind of complement they can precede and their case, specially in German.

	<ul style="list-style-type: none"> - To discern the different meanings that these prepositions can denote in communicative exchanges, focusing on those cases in which two or more prepositions converge in a specific meaning. - To distinguish and to use the different English/ German grammatical elements that denote the meanings of <i>para/por</i> in Spanish. - To apply them successfully in communicative situations.
LINGUISTIC SKILLS	<ul style="list-style-type: none"> - Oral and reading comprehension. - Oral interaction. - Written expression.
CONTENTS	<ul style="list-style-type: none"> - An introduction to prepositions - Prepositions and their complements - <i>Para</i> and <i>Por</i> in English/German - Other grammatical elements that denote <i>para</i> and <i>por</i>
DYNAMICS	This didactic proposal intends to favour the cooperative learning process through tasks that will require them to interact actively between them either in the classroom or in a virtual environment. Moreover, some individual tasks will be also proposed to refresh and consolidate concepts that are related to the established contents
RESOURCES AND MATERIALS	<p>Resources:</p> <ul style="list-style-type: none"> a) Traditional materials: <ul style="list-style-type: none"> - Textbooks - Sheets - PowerPoint presentations b) Electronics devices: <ul style="list-style-type: none"> - PCs - Smartphones (A previous authorisation will be required in case it will be used at school) <p>Education context:</p> <ul style="list-style-type: none"> a) Classroom b) Home (Digitally)
WORKPLAN	On the basis that all the activities are going to be preceded by a theoretical explanation of the main concepts and issues of each session, some activities are proposed according to a progression of difficulty in levels. In this way, students will learn the functioning of these prepositions through different activities:

	<p>Session 1-2: Firstly, teachers will project incomplete dialogues and he/she will require the students to complete the gaps with the appropriate preposition that expresses <i>para</i> or <i>por</i> in either English or German. In this way, they can have a first contact with the different uses that prepositions can express and to learn how to discern them. The communicative context of this dialogue serves to help them to identify the appropriate preposition.</p> <p>Moreover, they will make use of their digital devices to access <i>Duolingo</i> to complete the first lessons concerning the usage of prepositions. This activity is intended to reinforce their knowledge and, obviously, they are allowed to interact with other classmates to check if they have understood the explanation well.</p> <p>Finally, in order to take advantage of the function <i>stories</i>, the teacher will project some stories in which these prepositions appear, and learners are expected to read the whole story and, subsequently, to answer some questions concerning those stories. This last exercise will allow the teacher to evaluate if the explanation was already assimilated or if there is any difficulty to solve.</p> <p>Session 3-4: In order to broaden their knowledge, learners will be asked to complete the lessons 3 and 4 on <i>Duolingo</i> and to discuss a certain topic of interest orally in groups during the class.</p> <p>Moreover, they will be required to state both, opinions and justifications concerning the issue they have discussed in the previous activity. In this way, learners are actively producing more complex structures than in the previous phase, which requires the usage of prepositions in a more advance level.</p> <p>Finally, learners will form groups – they can decide whether they prefer to be in the same group of the first activity or to change it – and they will have to elaborate a text of 150-200</p>
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words concerning a current issue. This text will be posted in a forum of *Duolingo* and they are required to make use of the different meanings that each preposition denotes. Furthermore, each group will correct the possible mistakes that they may find in the text of other groups, which will prove that they have comprehended the usage of these prepositions in syntactic, semantic and pragmatical terms. As a surveillance control, teachers will provide feedback to each group too at the end of the activity.

Session 5-6:

In order to consolidate the previous knowledge and to get a first contact with other grammatical elements that can denote the same meaning as *para* and *por* in the second language, the teacher will ask the students to complete the fifth lesson of prepositions on *Duolingo* and to do an extra lesson in the highest difficulty after his prior theoretical explanation. Moreover, they should write in the forum other grammatical elements that they found while they carried out these lessons and their meaning so that teachers and other students can provide them feedback.

Once learners have become familiar with these grammatical elements, they will have to form groups and to prepare either a video or an oral presentation in which they should discuss any current issue in the second language taught. In this way, they are required to use all the linguistic mechanisms that they have learnt during these sessions to express the meanings of *para* and *por*. Obviously, students will be previously warned about this activity, as it requires a considerable amount of time. In this way, the teacher can evaluate if learners have successfully learnt the differences between the various grammatical elements that can be used and how to apply them.

RESULTS	<ul style="list-style-type: none"> • Learners should have mastered the differences between <i>para</i> and <i>por</i> in the second language taught. • They would have learnt a new grammatical theory that will broaden their linguistic, sociocultural, pragmatical, plurilingual and digital competences. • They would be able to prove their fluency and determination when using the grammatical elements that denote <i>para</i> and <i>por</i> in the communicative exchanges in which they have to use their second language. • Apart from the linguistic and communicative competences, they should have developed an autonomous awareness of their own learning, while using a mobile learning application to encourage the teaching and learning processes.
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7. Conclusion

Once the contrastive analysis has been conducted and *Duolingo* has been analysed, it is substantial to mention that a perfect methodology does not exist by itself since there are several extralinguistic factors that directly condition the teaching and learning processes, such as the motivation of the students, the resources that are available or the number of sessions per week. Nonetheless, an appropriate methodology is precisely the one that involves the learner in the learning experience through taking advantage of all the possible resources. As it was previously mentioned in this study, the mere explanation of concepts and abstract ideas concerning the prepositional usage of *para* and *por* in either English or German seems to generate more difficulties than positive effects, specially if one restricts the usage of these prepositions to the expression of purpose and causality, respectively.

Regarding the information offered by the contrastive analysis, the meanings of these prepositions are varied, and they depend on the complement they precede and the communicative contexts. In this way, although English and German make use of prepositions to denote most of those meanings, there are some cases in which they collapse with other grammatical elements, which can be arduous to comprehend by Spanish students if they do not

interact socially through the second language. Indeed, the learning act requires the praxis, that is, applying the knowledge that comes from a linguistic input to real-life situation, which is ultimately the most important goal to be accomplished in the second language teaching field. In this sense, the results of the contrastive analysis can operate appropriately as a resource that teachers should consider when composing a methodology and as a useful tool to know which aspects can create difficulties and, in case they occur, how to modify their didactic proposals in order to fit better to the student's needs.

Moreover, the implementation of digital platforms in the educative system and, specially, in the second language teaching environment, can provoke several benefits if they are considered under H. Douglas Brown's communicative language teaching methodology (2007). In this way, mobile learning applications, such as *Duolingo*, are relevant since they can be accessed anywhere with either a laptop or a mobile device. Despite of its possible inconveniences, *Duolingo* is a useful tool to consolidate grammatical aspects that can be subsequently applied in real-life situations. Moreover, the fact that it does not require any kind of subscription – unless one is interested in the function *Duolingo plus* – and that its functioning is based on simple, short lessons is what makes this application a unique and interesting complement that teachers can consider reinforcing those potential areas of difficulty. However, it is important to highlight that these applications serve as complements, that is, as an additional source of information and praxis. Significantly, due to the several limitations that have hindered the possibility of carrying out an empirical research, further research projects are encouraged to focus on the usage of the prepositions *para/por*, or any other grammatical aspect, and their learning through *Duolingo* in the second language teaching context.

Finally, it is of utmost importance to emphasize on the students' role during the learning experience. It has been argued along this study that learners cannot be regarded as passive beings that merely hear a theoretical explanation but, rather, they must be the main actors of their own learning process. Thus, an appropriate methodology to teach a second language should be inspired in the words of the Founding Father of the United States, Benjamin Franklin: "Tell me and I forget. Teach me and I remember. Involve me and I learn" (N. Tudela Capdevila, 2010: 71).

8. Bibliography

- AILA. (2020). Association Internationale de Linguistique Appliquée. Retrieved from: <https://aila.info/>. [Last accessed: 5th February 2021].
- Apandi, A. (2019). Gamification Meets Mobile Learning. In Raman, A & Rathakrishnan, M. *Redesigning Higher Education Initiatives for Industry 4.0*. (pp.144-162). Pennsylvania: IGI Global. <https://doi.org/10.4018/978-1-5225-7832-1.ch009>. [Last accessed: 24th February 2021].
- Balcik, I., Röhe, K. & Wróbel, V. (2019). *Die Deutsche Grammatik*. Stuttgart: PONS GmbH.
- Bolinger, D. (1957) Prepositions in English and Spanish. *American Association of Teachers of Spanish and Portuguese*, 40 (2), pp. 212-214. Retrieved from: <https://www.jstor.org/stable/334958>. [Last accessed: 26th February 2021].
- Bosque, I. (2010). *Nueva gramática de la lengua española*. Madrid: Espasa Libros, S. L. U..
- Brown, H. D. (2007). *Principles of Language Learning and Teaching*. (5th ed). New York: Pearson Education.
- Brumfit, C. (1995). Teacher professionalism and research. In G. Cook & B. Seidlhofer (eds.), (1995), *Principles and Practice in Applied Linguistics* (pp. 27-42). Oxford: Oxford University Press.
- Cambridge Dictionary*. (2021). Cambridge: Cambridge University Press. <https://dictionary.cambridge.org/es/>. [Last accessed: 25th March 2021].
- Chomsky, N. (1959). Verbal Behaviour by B. F. Skinner, *Language*, 35 (1), pp.26-58. Retrieved from: <https://www.jstor.org/stable/411334>. [Last accessed: 14th February 2021].
- Collins English Dictionary*. (2021). Glasgow: HarperCollins Publishers. <https://www.collinsdictionary.com/dictionary/english>. [Last accessed: 23rd March 2021].
- Cook, V. (2008). *Second Language Learning and Language Teaching*. (4th ed). London: Hodder Education.
- Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Strasbourg: Council of Europe Publishing: Retrieved from: <https://rm.coe.int/1680459f97>. [Last accessed: 27th February 2021].

- Council of Europe. (2020). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Strasbourg: Council of Europe Publishing. Retrieved from: <https://rm.coe.int/common-european-framework-of-reference-for-languages-learning-teaching/16809ea0d4>. [Last accessed: 27th February 2021].
- Davies, A. & Elder, C. (2004). *The Handbook of Applied Linguistics*. Malden, MA: Blackwell.
- Davies, A. (2007). *An Introduction to Applied Linguistics: From Practice to Theory*. Edinburgh: University of Edinburgh.
- De la Cruz Cabanillas, I. (2008). *English and Spanish in Contrast*. Alcalá: University of Alcalá.
- Diccionario de la Real Academia Española*. (2021). Madrid: Real Academia Española. <https://dle.rae.es/>. [Last accessed: 16th March 2021].
- Digitales Wörterbuch der deutschen Sprache*. (2021). Berlin: Berlin-Brandenburgischen Akademie der Wissenschaften. <https://www.dwds.de/>. [Last accessed: 27th March 2021].
- Di Pietro, R. J. (1971). *Language Structures in Contrast*. Massachusetts, Newbury House.
- Duden Wörterbuch*. (2021). Berlin: Bibliographisches Institut GmbH. <https://www.duden.de/woerterbuch>. [Last accessed: 24th March 2021].
- Duolingo* (n.d.). Duolingo: Sobre nosotros. Retrieved from: <https://www.duolingo.com/info>. [Last accessed: 28th March 2021].
- Farrell, R. & Farrell, C. F. (2012). *Side by Side: Spanish & English Grammar*. (3rd ed). New York: McGrawHill Education.
- Figueroa Flores, J. F. (2015). Using Gamification to Enhance Second Language Learning. *Digital Education Review*, 27, pp.32-54. Retrieved from: <https://revistes.ub.edu/index.php/der/article/view/11912/pdf>. [Last accessed: 21th February 2021].
- Fisiak, J. (1981a). *Contrastive Linguistics and the Language Teacher*. Oxford: Pergamon Press Ltd.
- Fisiak, J. (1981b). *Theoretical Issues in Contrastive Linguistics*. Amsterdam: John Benjamins Publishing.

- Fulk, R. D. (2008). English as a Germanic Language. In H. Momma & M. Matto (eds), 2008, *A Companion to the History of the English Language* (pp.142-149). Oxford: Blackwell Publishing Ltd. <https://doi.org/10.1002/9781444302851.ch13> . [Last accessed: 12th March 2021].
- Galindo Merino, M^a. M. (2009). Análisis Contrastivo y Enseñanza de Idiomas: De la Gramática a la Pragmática Intercultural. *Interlingüística*, 18, pp. 428-436. Retrieved from: https://scholar.google.es/citations?user=GFZdbL4AAAAJ&hl=es#d=gs_md_cita-d&u=%2Fcitations%3Fview_op%3Dview_citation%26hl%3Des%26user%3DGFZdbL4AAAAJ%26citation_for_view%3DGFZdbL4AAAAJ%3AKIAtU1dfN6UC%26tzm%3D-60. [Last accessed: 16th February 2021].
- Garcia, I. (2013). Learning a Language for Free While Translating the Web. Does Duolingo Work? *International Journal of English Linguistics*, 3 (1), pp.19-25. <https://doi.org/10.5539/ijel.v3n1p19>. [Last accessed: 7th April 2021].
- González, E. (1998). La oposición *Por/Para*: Una nueva propuesta didáctica. *ASELE*. Centro Virtual Cervantes: Instituto Cervantes, pp. 903-922. Retrieved from: https://cvc.cervantes.es/ensenanza/biblioteca_ele/asele/pdf/09/09_0906.pdf. [Last accessed: 2nd March 2021].
- Gutiérrez Quintana, E. (2004). Un posible modelo de análisis contrastivo entre lenguas afines. *Actas del I Simposio de didáctica de español para extranjeros: Teoría y práctica del Instituto Cervantes de Río de Janeiro*. Centro Virtual Cervantes: Instituto Cervantes, pp. 157-164. Retrieved from: https://cvc.cervantes.es/ensenanza/biblioteca_ele/publicaciones_centros/PDF/rio_2004/17_gutierrez.pdf. [Last accessed: 17th February 2021].
- Hoffmann, L. (2013). *Deutsche Grammatik. Grundlagen für Lehrausbildung, Schule, Deutsch als Zweitsprache und Deutsch als Fremdsprache*. Berlin: Erich Schmidt Verlag.
- Huang, W. H. & Soman, D. (2013). A Practitioner's Guide to Gamification of Education. Toronto: Rotman School of Management, pp. 1-29. Retrieved from: https://www.academia.edu/33219783/A_Practitioners_Guide_To_Gamification_Of_Education. [Last accessed: 23th February 2021].

- Jiménez Juliá, T. & Lübke, B. (2013). Los contextos preposicionales en español y en alemán. Aproximación contrastiva. *Verba*, 40, pp.203-252. Retrieved from: <https://revistas.usc.gal/index.php/verba/article/view/1192> [Last accessed: 10th March 2021].
- Kaplan, R. B. (2002). *The Oxford Handbook of Applied Linguistics*. (1st ed.). New York: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195384253.001.0001>. [Last accessed: 20th February 2021].
- Kaplan, R. B. (2012). Whence Applied Linguistics: *The Twentieth Century*. In R. B. Kaplan (Ed.), *The Oxford Handbook of Applied Linguistic* (2nd ed) (pp. 3-33). Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195384253.013.0001>. [Last accessed: 5th February 2021].
- Kapp, K. M. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. San Francisco: John Wiley & Sons.
- Keshavarz, M. H. (2012). *Contrastive Analysis & Error Analysis*. Tehran: Rahnama Press.
- Krashen, S. (1982). *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon Press.
- Krzeszowski, T. P. (1981). Contrastive analysis in New Dimension. In J. Fisiak (Ed.). *Contrastive Linguistics and the Language Teacher* (pp. 71-85). Oxford: Pergamon Press Ltd.
- Krzeszowski, T. P. (2011). *Contrasting Languages: To Scope of Contrastive Linguistics*. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110860146>. [Last accessed: 13th February 2021].
- Kukulska-Hulme, A & Shield, L (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20 (3), pp. 271-289. <https://doi.org/10.1017/S0958344008000335>. [Last accessed: 24th February 2021].
- Lado, R (1957). *Linguistics Across Cultures: applied Linguistics for Language Teachers*. Michigan: The University of Michigan Press.

- Lawley, J., Álvarez Calleja, M^a.A., Aragonés González, M., Bárcena Madera, E., Gibert Maceda, M^a. T., Marín Arrese, J. I., Read, T. (1999). *Gramática Contrastiva – Contrastive Grammar*. Madrid: UNED.
- Lennon, P. (2008). Contrastive Analysis, Error Analysis, Interlanguage. In Gramley, S. & Gramley, V. (Eds), *Bielefeld Introduction to Applied Linguistics* (pp.51-62). Bielefeld: Aisthesis Verlag.
- Levy, M. (1997) *CALL: Context and Conceptualisation*. Oxford: Oxford University Press.
- Lindstromberg, S. (2010). *English Prepositions Explained*. Revised edition. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/z.157>. [Last accessed: 6th March 2021].
- Mackey, A. & S. M. Gass. (2012). *Research Methods in Second Language Acquisition: A Practical Guide*. Oxford: Blackwell Publishing Ltd. <https://doi.org/10.1002/9781444347340>. [Last accessed: 6th February 2021].
- Martín Peris, E. (Dir.) (2008). *Diccionario de términos clave de ELE*. Madrid: Instituto Cervantes y SGEL. Retrieved from: https://cvc.cervantes.es/ensenanza/biblioteca_ele/diccio_ele/. [Last accessed: 28th April 2021].
- Matte Bon, F. (2010). De nuevo la gramática. *Antología de los encuentros internacionales del español como lengua extranjera*, (11), pp.246-266. Retrieved from: http://www.contrastiva.it/baul_contrastivo/dati/sanvicente/contrastiva/Contrastividad%20en%20general/Matte%20bon%20de%20nuevo%20la%20gramatica%202010.pdf [Last accessed: 9th March 2021].
- Mitchell, R., Florence, M. & Marsden, E. (2013). *Second Language Learning Theories*. (3rd ed). New York: Routledge.
- Moliner, M. (1990). *Diccionario de uso del español*. (1^a ed). Barcelona: Gredos.
- Moliner, M. (2016). *Diccionario de uso del español*. (4^a ed). Barcelona: Gredos.
- Müller, N. (1998). Transfer in Bilingual First Language Acquisition. *Bilingualism: Language and Cognition*, 1 (3), pp.151-172. <https://doi.org/10.1017/S1366728998000261>. [Last accessed: 11th February 2021].

- Muñoz Zayas, R. (2013). El aprendizaje de lenguas extranjeras en España. *eXtoikos*, (9), pp.63-68. Retrieved from: <https://dialnet.unirioja.es/servlet/articulo?codigo=4690854>. [Last accessed: 6th April 2021].
- National Institute of Educational Technologies and Teacher Training. (2017). *Common Digital Competence Framework for Teachers*. Madrid: Ministerio de Educación, Cultura y Deporte. Retrieved from: http://aprende.intef.es/sites/default/files/2018-05/2017_1020_Marco-Com%C3%BAn-de-Competencia-Digital-Docente.pdf. [Last accessed: 26th February 2021].
- Odlin, T. (2012). Some fundamental problems in the study of transfer. In Odlin, T. (2012). *Language Transfer: Cross-Linguistic Influence in Language Learning* (pp.25-47). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139524537.005>. [Last accessed: 19th February 2021].
- Oller, Jr., J. W. (1972). Contrastive Analysis. Difficulty and Predictability. *Foreign Language Annals*, 6 (1), pp.95-106. <https://doi.org/10.1111/j.1944-9720.1972.tb02553.x>. [Last accessed: 13th February 2021].
- Oller, Jr., J. & Ziahosseiny, S. M. (1970). The contrastive analysis hypothesis and spelling errors. *Language Learning*, 20 (2), pp. 183-189. <https://doi.org/10.1111/j.1467-1770.1970.tb00475.x>. [Last accessed: 17th February 2021].
- Otto, S. E. (2017). From Past to Present: *A Hundred Years of Technology for L2 Learning*. In Chapelle, C. A. & Sauro, S. (2017). *The Handbook of Technology and Second Language Teaching and Learning* (pp.10-25). New Jersey: John Wiley & Sons Inc. <https://doi.org/10.1002/9781118914069>. [Last accessed: 24th February 2021].
- Oxford English Dictionary*. (2021). Oxford: Oxford University Press. <https://www.oed.com/>. [Last accessed: 24th March 2021].
- Pimienta Prieto, J. (2011). Secuencias didácticas: Aprendizaje y evaluación de competencias en educación superior. *Bordón*, 63 (1), pp. 77-92. Retrieved from: <https://dialnet.unirioja.es/servlet/articulo?codigo=3601028>. [Last accessed: 28th March 2021].
- Pons deutsch-spanisch Wörterbuch* (2021). Stuttgart: PONS GmbH. <https://es.pons.com/traducci%C3%B3n>. [Last accessed: 23rd March 2021].

- Pullum, G. & Huddleston, R (2017). Prepositions and preposition phrases. In Pullum, G and Huddleston, R. (2017). *The Cambridge Grammar of the English Language*. (pp. 597-662). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781316423530.008>. [Last accessed: 9th March 2021].
- Rego, I. (2015). Mobile Language Learning: How Gamification Improves the Experience. *Handbook of Mobile Teaching and Learning*, pp. 1-12. https://doi.org/10.1007/978-3-642-41981-2_76-1. [Last accessed: 22th February 2021].
- Santos Gargallo, I. (1993). *Análisis contrastivo, análisis de errores e interlengua en el marco de la lingüística contrastiva*. Madrid: Síntesis.
- Santos Gargallo, I. (2017). *Lingüística aplicada a la enseñanza-aprendizaje del español como lengua extranjera*. (5th ed). Madrid: Arco/Libros, S. L.
- Saville-Troike, M. (2006). *Introducing Second Language Acquisition*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511888830>. [Last accessed: 25th February 2021].
- Sealey, A & Carter, B. (2004). Applied linguistics as Social Science. *International Journal of Applied Linguistics*, 15 (2), pp. 248-251. <https://doi.org/10.1111/j.1473-4192.2005.00090.x>. [Last accessed: 6th February 2021].
- Seco, M. (1986). *Diccionario de dudas y dificultades de la lengua española*. (9^a ed). Madrid: Espasa-Calpe, S.A.
- Sidoti, R. (2008). Por y para en los manuales de ELE. *MarcoELE: Revista de Didáctica Español Lengua Extranjera*, 7, pp.1-12. Retrieved from: <https://www.redalyc.org/articulo.oa?id=92152390011>. [Last accessed: 9th March 2021].
- Skinner, B. F. (1957). *Verbal Behaviour*. Massachusetts: B. F. Skinner Foundation Reprint Series.
- Stevens, P. (1977). Special-Purpose Language Learning: A perspective. *Language Teaching*, 10 (3), pp. 145-163. <https://doi.org/10.1017/s0261444800003402>. [Last accessed: 10th February 2021].

- Tudela Capdevila, N. (2010). Estrategias de inicio y cierre en el uso del manual En acción. *Actas del I Simposio internacional de didáctica de español para extranjeros del Instituto Cervantes de Argel*, pp. 71-81. Retrieved from: https://cvc.cervantes.es/ensenanza/biblioteca_ele/publicaciones_centros/PDF/argel_2010/09_tudela.pdf. [Last accessed: 7th April 2021].
- Vanhove, J. (2013). The Critical Period Hypothesis in Second Language Acquisition: A Statistical Critique and a Reanalysis. *PLOS ONE*, 8 (7). Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3723803/>. [Last accessed: 5th May 2021].
- Wardhaug, R. (1970). The Contrastive Analysis Hypothesis. *Teachers of English to Speakers of Other Languages Inc*, 4 (2), pp. 123-130. <https://doi.org/10.2307/3586182>. [Last accessed: 14th February 2021].
- Werbach, K. & Hunter, D. (2012). *For the Win: How Game Thinking Can Revolutionize Your Business*. Philadelphia: Wharton Digital Press. [For the Win How Game Thinking Can Revolutionize Your Business Pages 1 - 50 - Flip PDF Download | FlipHTML5](#). [Last accessed: 23th February 2021].
- Werbach, K. (2014). (Re)Defining Gamification: A Process Approach. In Spagnolli et al (Eds). *Persuasive Technology*, pp 266-272. Padua: 9th International Conference, Springer. <https://doi.org/10.1007/978-3-319-07127-5>. [Last accessed: 23th February 2021].
- Widdowson, H. (2006). Applied linguistics and interdisciplinarity. *International Journal of Applied Linguistics*, 16 (1), pp. 93-96. <https://doi.org/10.1111/j.1473-4192.2006.00108.x>. [Last accessed: 4th February 2021].

9. Annexes

Annex 1: Complete the following dialogue with the correct preposition. / Vervollständigen Sie den folgenden Dialog mit der richtigen Präposition:

1. **Georgia:** Hi Sam! Do you know whether María Moliner's dictionary is in the library? I have been looking for it and I cannot find it.

Sam: Yes, it is! I think that there is a concrete shelving _____ Spanish dictionaries. Why do you need it?

Georgia: I need it _____ Spanish term paper. I have to analyse the semantic change of certain words diachronically. Do you know whether it is possible to book it?

Sam: Hmm, _____ honest, I am not sure... the current pandemic has changed the booking policy and I think that it is not possible to take books out of the library, but I think my father has that book in his office. I can try to ask him _____ it. How much time would you need it?

Georgia: That would be amazing, Sam! I must deliver the project _____ 4th May. Then, if he could lend it to me _____ the next two weeks, I would appreciate that. Do you think he will agree?

Sam: Of course, he will! I know him and he is really understanding _____ for his strict behaviour. Do not worry, I will text you as soon as I receive an answer from my father

Georgia: Thank you, Sam!

2. **Klaus:** Hallo Thomas! Wie geht es dir?

Thomas: Hallo, mir geht es schlecht...

Klaus: Wieso? Bist du etwa krank?

Thomas: Ich bin nicht _____ Späßen aufgelegt, Klaus. Es ist _____ meiner Noten. Meine Prüfungen waren sehr schwierig _____ mich. _____ allem Unglück, wissen es meine Eltern noch nicht.

Klaus: Das ist ein Problem, Thomas. Du musst es deinen Eltern sofort sagen. Ich denke, dass Sie einsichtiger _____ deine Noten sein werden.

Thomas: Vielleicht kann ich ihnen die Situation erklären, aber ich denke, dass es eine Katastrophe _____ sie wird.

Klaus: Nein, keine Panik! Sag ihnen, dass du mehr _____ die Wiederholungsklausur lernen wirst und dann wird alles gut.

Thomas: Danke Klaus. Ich gehe jetzt _____ Hause und ich werde es ihnen sagen. Bis bald!

Klaus: Bis bald!

Annex 2. Examples of activities proposed by Duolingo concerning the use of *para* and *por*

 **PALABRA NUEVA**

Traduce esta oración


  I lived in Australia for a year.

Yo viví en Australia por un año

cervezas nuevo

¡Buen trabajo!

CONTINUAR

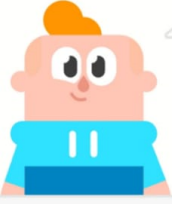


 **4 SEGUIDAS**

Traduce esta oración

Tenemos un gato por nuestros padres.

Wir haben eine Katze wegen unserer Eltern

Escucha y escribe

Gehen sie durch diese Tür

Annex 3. Example of an activity that consist in writing a text concerning a current issue and its subsequent post in a forum of Duolingo.



Didactic Proposal

LuisPrez688238  14  3  239

Elaborate a text of 150-200 words concerning a current issue. This text must be posted in this forum and it is required to make use of the different preposition we have studied in this unit.

0 ^ v justo ahora

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ORDENADO POR COMENTARIO PRINCIPAL v



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Topic: Discuss the impact of technology on our current lifestyle.

Technological advances have been the cause of several benefits in both educational and healthcare systems. Concerning the educative context, they have proved to be useful due to the Wi-Fi access to the Internet. Indeed, Internet is regarded as an enormous network system in which everyone can access the information that one may need for their own educative or professional purposes. Moreover, the improvements that technology has caused in the healthcare system are relevant since they have served to develop vaccines and healthcare treatments for uncommon illnesses. In this sense, these advances are evidences that intends to guarantee sanitary performances with the highest quality possible. Nevertheless, one must keep in mind that these technological advances are tools that have made our life easier, but that we are responsible for their correct usage. In this way, they are excellent practical resources for improving the human quality of life.

0 ^ v

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Aktivität

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Schreiben Sie einen Text von 150-200 Wörtern über ein aktuelles Thema. Die Texte müssen in diesem Forum hochgeladen werden.

0 ^ v justo ahora

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ORDENADO POR COMENTARIO PRINCIPAL v



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Thema: Feminismus

Diese Gruppe stimmt für die feministische Ideologie, die die Gleichstellung der Geschlechter anstrebt. Zuerst müssen patriarchalische Stereotypen beseitigt werden, die Frauen als passives Individuum in der Gesellschaft positionieren. Deswegen sind diese Stereotypen ungerecht für die Frauen, die um bessere Lebensbedingungen kämpfen. Außerdem muss den Menschen bewusst gemacht werden, dass das Patriarchat ein ernstes aktuelles Problem darstellt und Konsequenzen für zukünftige Generationen hat. Der Feminismus als egalitäre soziale Bewegung strebt die Gleichstellung von Männern und Frauen an, unabhängig von Unterschieden in Geschlecht, sexuellen Zustand oder anderen Faktoren, die unterschiedlich sein können. Auf diese Weise glauben wir, dass die feministische Bewegung wesentlich ist, um eine Welt zu schaffen, die auf Vertrauen und Respekt basiert.

0 ^ v

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